LE MARS PUBLIC LIBRARY

EXISTING AND FUTURE SPACE NEEDS PLANNING

SEPTEMBER 2022

FEH DESIGN

ARCHITECTURE / ENGINEERING / INTERIORS

IMPORTANT DEFINITIONS
FOR TERMINOLOGY USED IN THE REPORT

Square feet per capita is an important concept used in this report. It is important because public libraries, by definition, are libraries that serve the public. There is a direct relationship between the number of people to be served by a library and the size of the facility from which such service is provided. You will find that a number of per capita measures play heavily in the report's findings.

Two different types of square footage figures will be mentioned in this report. The first is "**Net Square Feet (NSF).**" Net Square Feet refers to the usable or "assignable" square footage within a room or a space. You can think of NSF as 'inside-the-wall dimensions." If you measure a rectangular office from wall to wall and it is 15 feet long and 10 feet wide, the net square footage of the space is 150 NSF (15' x 10'). The other type of square footage mentioned in this report is "**Gross Square Feet (GSF)**." Gross square feet is the total area of enclosed space in a building measured to the outside of the walls. It includes the thickness of the walls surrounding the hypothetical office space that was just measured, but it also includes space occupied by things like structural columns, stairwells, elevators, utility chases, and the thickness of exterior walls.

In general terms, you can think of net square feet as the amount of space that you use to conduct the intended business of a facility and gross square feet as the number of square feet that you'll need to build (and consequently the number of square feet you'll have to pay to have built) to house the desired functions. For buildings like libraries, mechanical rooms (e.g., spaces for heating, ventilation, and air conditioning equipment) and other spaces for necessary but ancillary purposes (e.g., restrooms) are not included in stating net square feet. They are considered as part of the GSF calculation. For planning purposes, a percentage (sometimes referred to as a net to gross factor) is applied to account for the difference between the space that you use to carry out the purpose for which the facility is built and the space you need to construct in order to efficiently carry out the intended functions.

For the purposes of this report, you can assume that calculations related to particular functions such as space for adult seating or space to house children's picture books is given in Net Square Feet (NSF) while the size of the overall building that is necessary to house these functions are given in Gross Square Feet (GSF).

It is worth noting that a third kind of square footage measure also comes into play. This is the square footage that libraries report annually to their state library agencies (in the case of Le Mars this is the State Library of Iowa). The State Library of Iowa, in turn, reports this data to the Institute of Museum and Library Services, which compiles national public library statistics. Unfortunately, the description of the federal data element that captures the square footage of libraries falls somewhere between net square feet and gross square feet. The question asked on the Public Library Survey is: "Provide the area, in square feet, of the public library…" and the definition states "This is the area on all floors enclosed by the outer walls of the library outlet. Include all areas occupied by the library outlet, including those areas off-limits to the public." Consequently, this statistic does include things like rest rooms and interior walls. FEH Design has determined that the existing Le Mars Library is 9,148 GSF. We estimate that the functional areas total 7,147 NSF. Le Mars reports its square footage to the State of Iowa as being 7,839 square feet, which seems appropriate given the definition used for reporting.

INTRODUCTION

Most planning activities bear a great similarity to arranging for a trip. Step one is determining your point of departure. Le Mars has a long tradition of library service dating back to the 1870s. From its humble beginnings as a subscription library housed in a variety of settings including the corner of a retail establishment, the Le Mars library achieved its status as a tax supported institution in the 1880s and occupied space over the city offices. It blossomed into a full-fledged public library when it secured a grant from Andrew Carnegie's Foundation to build the first dedicated library, which opened in 1904.

The more contemporary history of the Le Mars Public Library begins in 1976 when the library moved into a former Red Owl grocery store. At that time, the population of Le Mars was approximately 8,200. At approximately 7,200 Net Square Feet and 9,000 Gross Square Feet (GSF) , in 1976, Le Mars was providing a bit under one (1) NSF of library space per capita (0.88 NSF) and slightly over one (1) GSF (1.10 GSF) per capita.

Based on the architectural and design services of FEH Design, the library facility was extensively renovated and modernized in 2017. A small entrance lobby of about 140 GSF was added. The 2017 renovated facility will be used as the point of departure for the current space planning journey. However, before we depart, it's important to consider what was taking place in library services in the forty-plus years between 1976 and 2017. In 1976, hobbyists were the primary users of "microcomputers" and what was to become the Internet was primarily the realm of the military and of other large governmental and corporate entities.

In the time that elapsed between moving into the old Red Owl store and the 2017 renovation, the nature of public library services changed in several notable ways. Computer technologies became integral to library operations both as a tool to manage the inventory of books and other materials and as a mechanism used by the public to access information. New formats of materials for conveying information such as cassette tapes and videotapes came and went. Libraries that had traditionally been strong in providing story hours and summer reading programs for kids worked hard to develop robust programming efforts, including STEM, STEAM, and lots of other hands-on learning, that targeted tweens, teens, adults, and seniors. In short, the facility needs of libraries have changed because some of what libraries do has changed.

FEH Design has conducted a multi-part effort to determine the future space needs of the Le Mars Public Library. We first compared the existing Le Mars Library with twenty (20) peer communities (ten serving smaller population and ten serving larger populations). Our second step was to apply FEH's library space planning tool, which incorporates contemporary library standards as well as experience in planning scores of public libraries, to create three comparative scenarios. The first attempts to determine the existing space deficit based on the current population. The second scenario looks forward twenty years and offers a forecast of what might be needed as the population of Le Mars and the surrounding area continues to grow. The third scenario was developed involving the Library Director, key library staff and a representative of the Library Board. It attempts to identify the space that would be needed to offer some of the enhanced services being offered by exemplary peer libraries.

PEER COMPARISONS

FEH Design first compared the Le Mars Public Library to libraries in twenty (20) peer communities (ten smaller and ten larger) that were identified by the Library Director in consultation with the City Manager along with recommendations from the Library Board. (SEE FOLLOWING PAGE).

The peer analysis reveals that Le Mars falls considerably below the mean (average) for the peer communities in SF per capita (0.74 for Le Mars compared to 1.65 for peers using the square footage as reported to the State of Iowa) and for collection size (3.35 volumes per capita for Le Mars compared to 5.16 for peers).

While several deficiencies are noted above, there is however, some good news in the peer analysis. Despite having an undersized building and a considerably smaller collection than the mean and median measures from peer libraries, Le Mars is at the mid-point in terms of circulation, is slightly above the median on circulation per capita and performs admirably in a measure called "turnover rate" that quantifies the degree to which library collections are actively used.

Please note that there is a discrepancy between the number of volumes identified as "the existing size of the library's collection" (36,251) and what is identified in the Exhibit A as "Total Physical Items - Books, Videos, etc." (35,372). Both figures are correct; however, they reflect the library's inventory at different times and calculated in a slightly different fashion. The 35,372 figure is taken from the State Library of Iowa's statistics reported for 2019. 2019 was used instead of 2020 or 2021 state-level data because 2020 and 2021 circulation figures, which are also reported in the peer analysis, are badly skewed due to pandemic closures and COVID-related service disruptions. Simply put, using 2019 statistics for the peer chart results in the most reliable "apples-to-apples" comparisons. The 36,251 collection size is based on an inventory report generated by the library at the beginning of this space needs assessment process. This figure, which should be regarded as more up-to-date than the 2019 state statistics, was also used in determining the current space deficit. It represents the Le Mars Library's current stock as of the day the automated report was generated. It does not reflect magazine subscriptions. Neither of the statistics reflect e-books or other downloadable content available through the library. Both figures include only physical items which must be housed.

A / PEER COMPARISONS

Municipality	2021 Population	2010 Population	Percentage Population Increase/ Decrease	State Library Size Code	Size of Library Facility	Square Feet per Capita	Collections (Total Physical Items - Books, Videos, etc.)	Physical Items per Capita	Circulation (2019)	Circulation per Capita	Turnover Rate	Library Visits	Library Visits per Capita
Denison	8,178	8,298	-1.45%	E	14,000	1.71	52,681	6.44	43,323	5.30	0.82	91,500	11.19
Sioux Center	8,273	7,048	17.38%	E	23,000	2.78	64,993	7.86	234,904	28.39	3.61	184,199	22.27
Mount Pleasant	8,982	8,668	3.62%	E	23,000	2.56	51,468	5.73	74,342	8.28	1.44	60,613	6.75
Grinnell	9,513	9,218	3.20%	E	30,000	3.15	69,551	7.31	80,614	8.47	1.16	77,144	8.11
Fairfield	9,641	9,464	1.87%	E	21,000	2.18	79,297	8.22	141,566	14.68	1.79	118,851	12.33
Keokuk	9,792	10,780	-9.17%	F	17,623	1.80	35,861	3.66	80,573	8.23	2.25	73,411	7.50
Fort Madison	10,174	11,061	-8.02%	F	16,500	1.62	51,029	5.02	44,544	4.38	0.87	48,404	4.76
Carroll	10,224	10,103	1.20%	F	19,760	1.93	51,091	5.00	109,738	10.73	2.15	67,728	6.62
Waverly	10,398	9,874	5.31%	E	24,600	2.37	68,425	6.58	143,136	13.77	2.09	135,983	13.08
Pella	10,554	10,352	1.95%	F	21,000	1.99	82,741	7.84	218,493	20.70	2.64	118,419	11.22
Le Mars	**10,572**	**9,826**	**7.59%**	**E**	**7,839**	**0.74**	**35,372**	**3.35**	**92,518**	**8.75**	**2.62**	**64,940**	**6.14**
Pleasant Hill	10,860	8,785	23.62%	E	9,600	0.88	52,034	4.79	78,657	7.24	1.51	47,810	4.40
Storm Lake	11,256	10,600	6.19%	F	9,350	0.83	42,137	3.74	38,647	3.43	0.92	56,758	5.04
Spencer	11,356	11,233	1.09%	F	14,835	1.31	60,691	5.34	66,100	5.82	1.09	63,599	5.60
Oskaloosa	11,536	11,463	0.64%	F	25,000	2.17	62,897	5.45	125,883	10.91	2.00	70,247	6.09
Boone	12,469	12,661	-1.52%	F	33,000	2.65	72,501	5.81	104,638	8.39	1.44	122,429	9.82
Norwalk	13,609	8,945	52.14%	E	11,500	0.85	37,225	2.74	88,375	6.49	2.37	73,725	5.42
Newton	15,667	15,254	2.71%	F	21,000	1.34	70,567	4.50	115,290	7.36	1.63	78,390	5.00
Indianola	15,747	14,782	6.53%	F	11,250	0.71	39,988	2.54	91,684	5.82	2.29	76,062	4.83
Grimes	15,949	8,246	93.41%	F	6,439	0.40	36,932	2.32	137,350	8.61	3.72	112,332	7.04
Clive	18,814	15,447	21.80%	F	11,000	0.58	77,796	4.14	173,617	9.23	2.23	77,146	4.10
MEAN	**11,598**	**10,577**	**10.96%**	**NA**	**17,681**	**1.65**	**56,918**	**5.16**	**108,762**	**9.76**	**1.94**	**86,652**	**7.97**
MEDIAN	**10,572**	**10,103**	**3.20%**	**NA**	**17,623**	**1.71**	**52,681**	**5.02**	**92,518**	**8.39**	**2.00**	**76,062**	**6.62**
Le Mars	**10,572**	**9,826**	**7.59%**	**E**	**7,839**	**0.74**	**35,372**	**3.35**	**92,518**	**8.75**	**2.62**	**64,940**	**6.14**

Per Capita figures are derived by using 2019 library statistics (the most reliable given the pandemic) and 2021 estimated populations.

EXISTING CONDITION

The first scenario asks and attempts to answer the questions, "Does the Le Mars Public Library currently have enough space to effectively deliver services to the public?" And, if not, "How large is the existing deficit?" The answer to these questions is examined by applying a set of contemporary library standards to the existing size of the community (10,572 – U.S. Census Bureau July 1, 2021 estimate) and the existing size of the library's collections (36,251 volumes).

FEH Design first applied its proprietary interactive library space planning tool Fusing a population of 10,572 and adding 1,000 additional people to reflect potential users from outside the city's boundaries. The input and summary sheets are provided as Exhibit B and Exhibit C. A moderate level of user-friendliness was applied to the housing of the existing collection of 36,251 volumes, to user seating, computer seating, and staff spaces.

The space planning tool allows for the application of four levels of user-friendliness. The minimum level of user-friendliness simply complies with the Americans with Disabilities Act (ADA). "Moderate" user-friendliness provides slightly wider aisles, less density of book stacks and somewhat large allocations of space for seating. The third level of user-friendliness, "Ample," starts to provide a more spacious environment. The highest level of user-friendliness, "Hyper," achieves a very high level of spaciousness and for the use of many more innovative modes of seating and housing collections. Throughout our initial calculations, a moderate level of user-friendliness has been selected – a step above minimal ADA compliance, but by no means lavish.

This first effort answers the first two questions posed. It appears that the Le Mars Public Library does not have enough space to effectively deliver existing services. It is important to note that discussions with the library director and staff reveal that the current facility places significant limitations on the library's ability to expand and enhance the programming are creative activities services that are becoming the hallmarks of exemplary libraries.

FEH Design calculates the current net square footage (NSF) as approximately 7,147 and the gross square footage (GSF) of the library as 9,198. FEH Design calculates the existing need using the 2021 U.S. Census population plus 1,000 non-municipal users at 9,781 NSF or 12,520 GSF. Subtracting the existing from this calculation answers the second question. The Le Mars Public Library currently has a deficit of approximately 2,634 NSF or 3,372 GSF just to house the collections and services that it currently provides. To translate this need into lay person's terms, Le Mars is currently squeezing twelve and a half pounds of potatoes into a nine-pound sack. A discussion of what functional areas are undersized will follow the presentation of the other two scenarios.

The inclusion of 1,000 non-municipal residents in determining the service population is a very conservative estimate. The Iowa Workforce Development "Laborshed" study shows that approximately 119,929 people ages 18 – 64 live in the Le Mars "laborshed" and that 31,424 of these individuals were likely to accept employment in Le Mars if it was available. The same study shows that an estimate of only 1,895 Le Mars residents ages 18 – 64 currently commute to work in other communities. Obviously, considerable economic development supported by the availability of housing and proportional public services such as the library could positively impact both the size of the population and the tax base in the future.

B / EXISTING LIBRARY SPACE NEEDS

LIBRARY SPACE NEEDS ESTIMATOR - FEH DESIGN

This ***Library Space Needs Estimator*** is intended to provide an initial assessment of how much library space a community needs. It is not intended to be a replacement for more in-depth space planning.

Please enter information in the black-shaded boxes. Lines that require responses are also indentified by the word **ENTER or SELECT** in **violet** as well as a description of the data/information that is required in the black boxes. Items marked **ENTER** require direct entry of data (type in the answer). Those marked with the word **SELECT** require the selction of an answer from a drop-down menu. Click on the arrow that will appear next to the black box to access the drop-down data. Grey-shaded boxes provide instructions or information to assist you in filling out the form.

BASIC INFORMATION		
ENTER Library Name ▶▶▶		Le Mars Public Library
SELECT Current Year (XXXX) ▶▶▶		2022
ENTER Today's Date ▶▶▶		7/28/2022
ENTER Scenario Description ▶▶▶		Le Mars Existing Need
DESIGN POPULATION		
ENTER Basic Population Served (Home Community) ▶▶▶		10,572
SELECT 10-Year Percentage Anticipated Growth (Home Community) ▶▶▶		0%
Home Community 10-Year Population Projection	2032	10,572
ENTER Extended Service Population (Additional Population Served) ▶▶▶		1,000
SELECT 10-Year Percentage Anticipated Growth (Extended Community) ▶▶▶		0%
Extended Community 10-Year Population Projection	2032	1,000
Combined 10-Year Design Population Projection	2032	11,572
SELECT Long-Term Anticipated Percentage Growth (Year 11 - 20) ▶▶▶		0%
FINAL DESIGN POPULATION APPLIED TO CALCULATIONS	**2042**	**11,572**

STAFF		
ENTER Total Number of Library Staff (Full-Time Equivalents) ▶▶▶		6.325
ENTER Total Number of Library Staff (TOTAL Number of PEOPLE - full-time and part-time) ▶▶▶		16

COLLECTIONS

Communities currently served by libraries that are severely undersized or that are experiencing significant growth in population may wish to plan for larger collections than they have at the present time. Please enter below the overall percentage growth you believe is desirable for adult, children's, and young adult collections. **NOTE: Recognize that collection expansion comes with a cost both in terms of purchasing new materials and building a facility adequate to house the materials. Consider whether it is likely that your funding will support significant expansion.**

SELECT Desired Percentage growth of ADULT collections	▶▶▶	0%
SELECT Desired Percentage growth of CHILDREN'S collections	▶▶▶	0%
SELECT Desired Percentage growth of YOUNG ADULT collections	▶▶▶	0%

ADULT COLLECTIONS

ENTER current number of volumes in the **ADULT** general collection (books and audiobooks) Include all ADULT books AND AUDIOBOOKS	▶▶▶	16,367
ENTER current number of **ADULT** DVDs, Music CD and other media collections except audiobooks Do NOT include AUDIOBOOKS (Include them with books above)	▶▶▶	3,630
ENTER current number of **ADULT** magazine and newspaper TITLES		65

CHILDREN'S COLLECTIONS

ENTER current number of **PRE-SCHOOL** (picture books, easy readers, board books) volumes	▶▶▶	6,876
ENTER current number of general **CHILDREN'S** (j fiction, j non-fiction, chapter books and AUDIOBOOKS) volumes	▶▶▶	5,850
ENTER current number of **CHILDREN'S** DVDs, Music CDs and other media collections except audiobooks	▶▶▶	1,189
ENTER current number of **CHILDREN'S** magazine and newspaper TITLES	▶▶▶	5

YOUNG ADULT COLLECTIONS

ENTER current number of **TEEN/ YOUNG ADULT** volumes (all types)	▶▶▶	2,339
ENTER current number of **TEEN/ YOUNG ADULT** magazine and newspaper TITLES	▶▶▶	2

You have indicated a total collection size (including future desired growth) of:

36,251

As a point of general reference, many public libraries offer collections of approximately 3 to 4 volumes per capita in the service area. Based on the design population calculation performed above, this would translate into between:

34,716 and

46,288 volumes

The overall size of a library facility is affected by the degree of user-friendliness that is desired. For example, a library could be deisgned to meet the minimum clearance guidelines of the Americans with Disabilities Act (ADA) or it could be designed to create a spacious "living room" atmosphere.

If money were no object, most library planners would choose to maximize the users' experience by making the entire library as user-friendly as possible. Using lower-height shelving units, providing wider aisles between ranges of shelves, and offering more spacious seating areas and larger computer workstations are examples of design decisions that might be made. However money usually ***IS*** an important factor. Consequently, achieving the right balance between user-friendliness and cost is usually essential.

This planning tool takes the approach that these kinds of decisions shouldn't fall into the all-or-nothing category! It allows for the application of various degrees of user-friendliness to different functional areas of the library. Separate choices can be made regarding the desired degree of user-friendliness for shelving areas, seating areas, computer/technology areas, and staff areas. In each instance, the basic level of user-friendliness is called "**Minimum Acceptable User-Friendliness**." This level meets all ADA requirements and applies widely accepted professional standards to ensure efficient operation and to guarantee that spaces do not feel overly crowded. A second level, "**Moderate User-Friendliness**" applies larger unit measures to achieve an enhanced user experience. A third level is characterized as "**Ample User-Friendliness**." This level is characterized by spacious aisles, larger casual and study seating areas, and computer workstations with greater privacy and more expansive space for spreading user materials. Finally, we have provided a fourth level, which is characterized as "Hyper User-Friendliness." This can be considered as the **IDEAL** level and it often involves the use of alternative furnishings. For example, a children's area that is **"Hyper User-Friendliness"** adds additional qualities intended to enhance the user-experience and staff-efficiency. At the Hyper User-Friendliness level, browser bins are widely used instead of shelving for pre-school materials and many non-print items. DVDs are generally housed in browser shelving inserts instead of on regular shelves. Self contained study pods might be substituted for traditional casual or study seating and computer workstations might be large enough to accommodate two people working together. By adjusting the level of user-friendliness applied in the various functional categories, you can determine the impact of applying different priorities to the user-friendliness of collection areas, seating, areas, etc. More in-depth descriptions accompany each choice called for below.

COLLECTION USER FRIENDLINESS

MINIMUM ACCEPTABLE USER-FRIENDLINESS IN COLLECTION AREAS	ADA-Compliant aisles (36"+ - normally 40") between stacks and 48" end aisles, traditional shelf heights (up to 84" in adult areas), ranges up to 6 sections long, most shelves used, minimum acceptable percentage shelf-loading (usually 85%)
MODERATE USER-FRIENDLINESS IN COLLECTION AREAS	42"aisles (48" end aisles), moderate shelf heights, ranges up to 5 sections long, most bottom shelves empty (except in Children's area), moderate percentage shelf loading (usually 80%)
AMPLE USER-FRIENDLINESS IN COLLECTION AREAS	48" aisles (and end aisles), low sheving heights, stack ranges no longer than 4 sections long, most bottom shelves empty (except in Children's area), ample space for reshelving on each shelf (usually 75% shelf-loading) , most pre-school children's items and non-print media in shelving units (as opposed to browser bins).
HYPER USER-FRIENDLINESS IN COLLECTION AREAS	52" aisles (and end aisles), low sheving heights, stack ranges no longer than 3 sections long, most bottom shelves empty (except in Children's area), ample space for reshelving on each shelf (usually 70% shelf-loading) , browser bins for pre-school materials and most non-print/ media items.
SELECT Desired level of user-friendliness of adult collections ▶▶▶	**Moderate User-Friendliness**
SELECT Desired level of user-friendliness of children's collections ▶▶▶	**Moderate User-Friendliness**
SELECT Desired level of user-friendliness of young adult collections >>> ▶▶▶	**Moderate User-Friendliness**

PUBLIC SEATING	
CASUAL AND STUDY SEATING USER-FRIENDLINESS	
MINIMUM ACCEPTABLE USER-FRIENDLINESS OF CASUAL & STUDY SEATING	Traditional sized adult casual seating and adult study area seating (such as 4-top tables). Traditional (relatively small) children's and teen casual seating and appropriate-height for relatively small study seating (usually 4-top tables) for children, and teens.
MODERATE USER-FRIENDLINESS OF CASUAL & STUDY SEATING	Somewhat enhanced comfort in casual seating areas (larger chairs) for adults, children, and teens/ young adults. Greater privacy in study areas (more table surface per user), some enclosed tutoring space(s).
AMPLE USER-FRIENDLINESS	Comfortable casual spaces with somewhat larger easy chairs in adult areas. NO large (4-top or larger) study tables. Two-person study tables with adequate space between tables to afford good privacy. Some non-traditional study and casual seating for teens and children. At least one enclosed group study space in addition to at least one tutoring space.
HYPER USER-FRIENDLINESS OF CASUAL & STUDY SEATING	Living room feel in casual seating areas with large easy chairs and occasional tables in adult areas. Greater privacy in study areas (individual and two-person tables with more space between tables). Innovative study seating such as pods or booths for teens, multiple enclosed group study areas in addition to tutoring spaces, multi-generational seating in children's area, highly creative seating for children and teens.
SELECT Desired Seating Distribution	Default settings are 60% Adult, 30% Children's, and 10% Teen/Young Adult
SELECT Desired Percentage Adult Seating	50%
SELECT Desired Percentage Children's Seating	40%
SELECT Desired Percentage Young Adult Seating	10%
TOTAL PERCENTAGE SHOULD EQUAL 100%	100%
SELECT Desired Level of User-Friendliness of Adult Seating ▶▶▶	Moderate User-Friendliness
SELECT Desired Level of User-Friendliness of Children's Seating ▶▶▶	Moderate User-Friendliness
SELECT Desired Level of User-Friendliness of Teen Seating ▶▶▶	Moderate User-Friendliness

COMPUTER SEATING USER-FRIENDLINESS	
MINIMUM ACCEPTABLE USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Traditional single-user public-access computer workstations for adults, children, and teens.
MODERATE USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Moderate computer workstations with privacy dividers and some additional space to spread out work for adults and teens. Single-user workstations for children.
AMPLE USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Somewhat larger computer workstations with privacy dividers and additional space to spread out work for adults and teens. Approximately 20% of adult workstations suitable for two individuals to work together. Double-sized workstations for children (space for 2 children or an adult and child to work together).
HYPER USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Large computer workstations with privacy dividers and space to spread out work for adults and teens. Some double workstations for adults (space for multiple users to work together); at least half double-sized workstations for teens (space for 2 teens to work together); and all double-sized workstations for children (space for 2 children or an adult and child to work together). Booth-style group computer space for teens. Laptop bar space for plugging in and using user-owned devices.
SELECT Desired Level of User-Friendliness of Adult Computer Workstations ▶▶▶	**Moderate User-Friendliness**
SELECT Desired Level of User-Friendliness of Children's Computer Workstations ▶▶▶	**Moderate User-Friendliness**
SELECT Desired Level of User-Friendliness of Teen Computer Workstations ▶▶▶	**Moderate User-Friendliness**
ENTER Desired Number of Adult Desktop Computer and Technology Workstations **Include special purpose workstations such as microfilm units, units for visually impaired, as well as printer and scanner stations.** ▶▶▶	**10**
ENTER Desired Number of Children's Desktop Early Literacy/ Educational Game Computer Workstations ▶▶▶	**0**
ENTER Desired Number of Young Adult Desktop Computer Workstations ▶▶▶	**0**
ENTER Desired Number of Laptop Bar Stations ▶▶▶	**0**

STAFF SPACES	
MINIMUM ACCEPTABLE USER-FRIENDLINESS OF STAFF WORK SPACES	Acceptable private office space(s), public service desk positions and staff workstation sizes.
MODERATE USER-FRIENDLINESS OF STAFF WORK SPACES	Moderately-sized private office space(s), public service desk positions and, "back-of-the-house" staff workstation areas.
AMPLE USER-FRIENDLINESS OF STAFF WORK SPACES	Large private office space(s), public service desk positions and, "back-of-the-house" staff workstation areas as well as some shared work areas (such as work islands).
HYPER USER-FRIENDLINESS OF STAFF WORK SPACES	Spacious private office space(s), public service desk positions and, "back-of-the-house" staff workstations and shared work areas (such as work islands).
SELECT Desired Level of User-Friendliness of staff work spaces **(Defaults to Minimum Acceptable User-Friendliness)** ▶▶▶	**Moderate User-Friendliness**
ENCLOSED PERSONAL OFFICES	
The space needs calculator assumes providing an enclosed office for the library director and one circulation desk workstation.	
ENTER Desired number of **ADDITIONAL** enclosed offices ▶▶▶	1
ENTER Desired number of service stations at circulation desk **(Defaults to 1)** ▶▶▶	3
OTHER PUBLIC SERVICE DESK WORKSTATIONS	
The library may or may not need additional public service desks. If the desk specified below is not required, please enter "0." **NOTE: Do not include "behind the scenes" staff workspaces. This is calculated automatically.**	
ENTER Desired number of service stations at reference information desk ▶▶▶	0
ENTER Desired number of service stations at children's desk ▶▶▶	0
ENTER Desired number of service stations at young adult/teen desk ▶▶▶	0
ENTER Desired number of workstations at other public service desks ▶▶▶	0

MEETING AND GATHERING SPACE

Meeting and Gathering Space needs vary significantly from one community to another depending on factors such as programming needs, services offered, and the availability of alternate accessible meeting spaces in the community. Enter the approximate number of seats desired for each of the following types of meeting and gathering spaces. A zero choice indicates that the specified type of space is not needed. All-purpose meeting room seating should reflect "theater-style" (chairs in rows) seating. Capacity of these rooms with table seating would be less.

ENTER Desired Number of Seats - Conference Room #1 ▶▶▶	0
ENTER Desired Number of Seats - Conference Room #2 ▶▶▶	0
ENTER Desired Number of Seats - All-Purpose Meeting Room #1 ▶▶▶	30
ENTER Desired Number of Seats - All-Purpose Meeting Room #2 ▶▶▶	0
ENTER Desired Number of Seats - Children's Program Area ▶▶▶	0
ENTER Desired Number of Seats - Children's Craft Area ▶▶▶	0
ENTER Desired Number of Occupants - Children's Creative Play Space ▶▶▶	0
ENTER Desired Number of Seats - Maker Space ▶▶▶	0
ENTER Desired Number of Seats - Computer Lab ▶▶▶	0
ENTER Desired Number of Seats - Tutoring Space(s) ▶▶▶	0
ENTER Desired Number of Seats - Group Study Space(s) ▶▶▶	8
ENTER Desired Number of Seats - Other Meeting Space # 1 ▶▶▶	0
ENTER Desired Number of Seats - Other Meeting Space # 2 ▶▶▶	0

SPECIAL USE SPACES

Special use spaces are areas that are not specifically required for the operation of basic library services but encourage or enhance library use. Amenities such as a cafe or coffee bar, an art gallery, a Friends' book sale area, a Friends' book/gift shop, or a Friends' book sorting area, or an office or offices of a related agency (such as a literacy group) are examples of special use spaces.

Please select YES or NO in response to the questions below.

SELECT Do you want to include a small coffee bar? ▶▶▶	No
SELECT Do you want to include a cafe? ▶▶▶	No
SELECT Do you want to include an art gallery? ▶▶▶	No
SELECT Do you want to include a Friends' book sale area? ▶▶▶	No
SELECT Do you want to include a Friends' book/ gift shop? ▶▶▶	No
SELECT Do you want to include a Friends' book sorting area? ▶▶▶	No
SELECT Do you want to include space for an Automated Materials Handling (AMH) system (RFID sorter)? ▶▶▶	No

MISCELLANEOUS SPACES

Miscellaneous spaces are exactly that: functional spaces that are necessary but that don't fit nicely into any particular category. Please note that space for restrooms, mechanical systems, stairwells, and other "non-assignable" categories will be added in the separate "Structural Spaces/ Non-Assignable Spaces" section that follows this "Miscellaneous Spaces" section. Note also that allowances for an entrance lobby, a service entrance, and non-custodial storage rooms will be calculated and added automatically based on the overall size of the building.

ENTER How many self checkout units do you want?	▶▶▶	0
ENTER How many public copy machines do you want?	▶▶▶	1
ENTER How many dictionary stands (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many atlas stands (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many map cases (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many microfilm cabinets (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many offices for other organizations or agencies (if any) do you wish to include?	▶▶▶	0

STRUCTURAL SPACES/ NON-ASSIGNABLE SPACES

There are two types of spaces in any facility that must be built (and paid for) that are not included in the kind of functional calculations that are reflected above. The first is "structural space." Exterior walls, permanent interior walls/ partitions, and supporting columns are examples of this kind of space that is not available for public use. Non-assignable spaces are additional areas that are not available for assignment to an occupant for specific use but that are necessary for the operation of the building. Space occupied by stairwells (counted separately for each floor), elevators (again counted separately for each floor), restrooms, mechanical and custodial rooms, and computer/ data wiring closets are examples of these kinds of spaces.

For purposes of creating an initial estimate of space needs, structural space and non-assignable space is typically accounted for in two ways. First, a specific space allocation is added to reflect space needed for "vertical transportation" (a fancy way of saying space for an elevator and stairwells required by building/ fire codes. Second, a percentage is added on to the total of needed functional spaces that have been identiified to accommodate restrooms, mechanical space, structural members, etc. A larger percentage is typically required for renovation projects than for projects that are newly designed, so the percentage is increased if a project is going to involve a renovation of space. Finally, smaller buildings usually require a higher allocation of structural/ non-assignable space than larger facilities due to economies of scale. Therefore, the percentage applied is automatically increased if the total square footage of the facility is under 10,000 Gross Square Feet.

Please enter 1 for YES or 2 for NO in response to the questions below.

ENTER Is the anticipated project in part or wholly a renovation project?	▶▶▶	No
ENTER Is the anticipated project likely to have more than a single floor?	▶▶▶	No

NOTE: **A determination as to whether to increase or decrease the percentage applied will be made based on an estimate of the total functional square footage that is calculated. This adjustment will be made automatically.**

STRUCTURAL SPACE/ NON-ASSIGNABLE SPACE PERCENTAGE APPLIED	***28 %***

ESTIMATED TOTAL SPACE NEED	***12,520 GSF***

C / SUMMARY OF EXISTING SPACE NEEDS

SUMMARY OF ESTIMATED SPACE NEEDS - FEH DESIGN

BASIC INFORMATION	
Library Name	Le Mars Public Library
Year Space Needs Analysis Performed	2022
Space Needs Calculation Target Year	2042
Design Population Applied	11,572

COLLECTION SPACES	Square Footage
Adult Collection Space Required	1,588
Children's Collection Space Required	959
Young Adult Collection Space Required	213
TOTAL COLLECTION SPACE REQUIRED	***2,759***

SEATING SPACES	User Seats	Square Footage
Recommended Total User Seating Base (not including computer or meeting room seating). NOTE: Total number of seats may differ from sum of counts for individual areas due to rounding.	**77**	
CASUAL AND STUDY SEATING		
Adult Casual and Study Seating Suggested Based on Population Served	39	1,351
Children's Casual and Study Seating Suggested Based on Population Served	31	772
Young Adult Casual and Study Seating Suggested Based on Population Served	8	270
TOTAL CASUAL AND STUDY SEATING REQUIRED		2,393
COMPUTER/ TECHNOLOGY SEATING	**Computer Seats**	**Square Footage**
Adult Desktop Computer Workstations	10	400
Children's Desktop/ Early Literacy/ Educational Game Workstations	0	-
Young Adult Desktop Computer Workstations	0	-
Laptop Bar Stations	0	-
TOTAL COMPUTER/ TECHNOLOGY SPACE REQUIRED		400
TOTAL USER SEATING SPACE REQUIRED		***2,793***

STAFF SPACES	Square Footage
Director's Office	190
Other Enclosed Offices	170
Circulation Workstations	480
Reference/ Information Desk Workstation(s)	0
Children's Service Desk Workstation(s)	0
Young Adult Service Desk Workstation(s)	0
Other Service Desks	0
General Staff Workspace	1400
Staff Lunch/ Break Room	420
TOTAL STAFF WORKSPACE REQUIRED	***2,660***

MEETING AND GATHERING SPACES	Occupancy	Square Footage
Conference Room #1	0	-
Conference Room #2	0	-
All-Purpose Room #1	30	450
All-Purpose Room #2	0	-
Children's Program Area	0	-
Children's Craft Area	0	-
Children's Creative Play Space	0	-
Maker Space	0	-
Computer Lab	0	-
Tutoring Space(s)	0	-
Group Study Space(s)	8	330
Other Meeting Space #1	0	-
Other Meeting Space #2	0	-
TOTAL MEETING & GATHERING SPACE		***780***

SPECIAL USE SPACES	Square Footage
Coffee Bar	-
Café	-
Art Gallery	-
Friends' Book Sale Area	-
Friends' Gift Shop	-
Friends' Office/ Book Sorting Area	-
Co-Working Space	-
Office for another organization/ agency	-
AMH (RFID) sorting equipment	-
TOTAL SPECIAL USE SPACES	**-**

MISCELLANEOUS SPACES	
Space for areas such as restrooms, mechanical rooms, janitorial storage are included in the percentage that is applied in the Structural Space/ Non-Assignable Space category. However, there are some some important spaces that are not included in the functional categories above that are important to library operations. These are broken out below.	
	Square Footage
Self Checkout Unit(s)	0
Copy Machine(s)	50
Dictionary Stand(s)	0
Atlas Stand(s)	0
Map Case(s)	0
Microform Cabinet(s)	0
Vertical File Cabinet(s)	0
Lateral File Cabinet(s)	0
TOTAL MISCELLANEOUS SPACES	***50***

UNCATEGORIZED SPACE	
	Square Footage
Supply Storage	106
General Storage	271
Entrance Lobby(ies)	271
Service/ Loading Entrance	90
TOTAL UNCATEGORIZED SPACE	***739***

TOTAL FUNCTIONAL SPACE	***9,781***
STRUCTURAL SPACE/ NON-ASSIGNABLE SPACE PERCENTAGE APPLIED	**28 %**
GRAND TOTAL ESTIMATED TOTAL SPACE NEED (GROSS SQUARE FEET)	***12,520 GSF***

Twenty-Year Population Growth Scenario

If it is assumed that both the City of Le Mars and the surrounding area are likely to continue modest, but steady growth, how much space will the Le Mars Library need to provide quality service 20 years hence? FEH again applied its library space planning tool using a total service population of 12,265. This includes projected growth in the City to 10,995 by 2032 and somewhat slower growth applied to the non-municipal user population. It the assumes even more modest growth for years 11 – 20. The other major change made in calculating the 20-year population growth scenario is enlarging the size of the library's collections to approximately 4.60 volumes per capita. This collection growth is not without basis. It represents a level that is still well below the 5.02 volumes per capita median for peer libraries.

The result of this scenario (which appears as Exhibit D and Exhibit E), arrives at a space need of 15,971 NSF or 19,965 GSF. This translates into a deficit of net square feet (functional space) of 8,824 and a GSF deficit of 10,817.

Ideal Services Twenty-Year Population Growth Scenario

The Ideal Services Population Growth Scenario also looks forward twenty years. It assumes the same municipal growth as the basic twenty-year population growth scenario and, at the recommendation of the library administration and staff, uses a slightly higher non-municipal service population. The result is a 20-year total service population of 12,791. While this scenario also includes an effort to increase the collections to approach the mid-point among the peers, it results in a minimally larger inventory of books and other materials than the basic 20-year growth scenario but, because it applies a large population, yields a slightly lower volumes per capita (4.52 vs. 4.57).

This scenario adds significantly in areas related to the meeting and gathering spaces required for enhanced programming. The result of the scenario when compared to the existing library is a deficit of 12,886 NSF or 15,894 GSF. (The worksheets showing the assumptions used and the results for this scenario appear as Exhibit F and Exhibit G.)

D / 20-YEAR POPULATION GROWTH INPUT

LIBRARY SPACE NEEDS ESTIMATOR - FEH DESIGN

This ***Library Space Needs Estimator*** is intended to provide an initial assessment of how much library space a community needs. It is not intended to be a replacement for more in-depth space planning.

Please enter information in the black-shaded boxes. Lines that require responses are also indentified by the word **ENTER or SELECT** in **violet** as well as a description of the data/information that is required in the black boxes. Items marked **ENTER** require direct entry of data (type in the answer). Those marked with the word **SELECT** require the selction of an answer from a drop-down menu. Click on the arrow that will appear next to the black box to access the drop-down data. Grey-shaded boxes provide instructions or information to assist you in filling out the form.

BASIC INFORMATION		
ENTER Library Name ▶▶▶		Le Mars Public Library
SELECT Current Year (XXXX) ▶▶▶		2022
ENTER Today's Date ▶▶▶		7/31/2022
ENTER Scenario Description ▶▶▶		Le Mars - 20 Year Population and Collection Growth
DESIGN POPULATION		
ENTER Basic Population Served (Home Community) ▶▶▶		10,572
SELECT 10-Year Percentage Anticipated Growth (Home Community) ▶▶▶		4%
Home Community 10-Year Population Projection	2032	10,995
ENTER Extended Service Population (Additional Population Served) ▶▶▶		1,000
SELECT 10-Year Percentage Anticipated Growth (Extended Community) ▶▶▶		3%
Extended Community 10-Year Population Projection	2032	1,030
Combined 10-Year Design Population Projection	2032	12,025
SELECT Long-Term Anticipated Percentage Growth (Year 11 - 20) ▶▶▶		2%
FINAL DESIGN POPULATION APPLIED TO CALCULATIONS	**2042**	**12,265**

STAFF		
ENTER Total Number of Library Staff (Full-Time Equivalents) ▶▶▶		6.325
ENTER Total Number of Library Staff (TOTAL Number of PEOPLE - full-time and part-time) ▶▶▶		16

COLLECTIONS

Communities currently served by libraries that are severely undersized or that are experiencing significant growth in population may wish to plan for larger collections than they have at the present time. Please enter below the overall percentage growth you believe is desirable for adult, children's, and young adult collections. **NOTE: Recognize that collection expansion comes with a cost both in terms of purchasing new materials and building a facility adequate to house the materials. Consider whether it is likely that your funding will support significant expansion.**

SELECT Desired Percentage growth of ADULT collections	▶▶▶	0%
SELECT Desired Percentage growth of CHILDREN'S collections	▶▶▶	0%
SELECT Desired Percentage growth of YOUNG ADULT collections	▶▶▶	0%

ADULT COLLECTIONS

ENTER current number of volumes in the **ADULT** general collection (books and audiobooks) **Include all ADULT books AND AUDIOBOOKS**	▶▶▶	25,313
ENTER current number of **ADULT** DVDs, Music CD and other media collections except audiobooks **Do NOT include AUDIOBOOKS (Include them with books above)**	▶▶▶	5,615
ENTER current number of **ADULT** magazine and newspaper **TITLES**		65

CHILDREN'S COLLECTIONS

ENTER current number of **PRE-SCHOOL** (picture books, easy readers, board books) volumes	▶▶▶	10,634
ENTER current number of general **CHILDREN'S** (j fiction, j non-fiction, chapter books and **AUDIOBOOKS**) volumes	▶▶▶	9,048
ENTER current number of **CHILDREN'S** DVDs, Music CDs and other media collections except audiobooks	▶▶▶	1,839
ENTER current number of **CHILDREN'S** magazine and newspaper **TITLES**	▶▶▶	5

YOUNG ADULT COLLECTIONS

ENTER current number of **TEEN/ YOUNG ADULT** volumes (all types)	▶▶▶	3,617
ENTER current number of **TEEN/ YOUNG ADULT** magazine and newspaper **TITLES**	▶▶▶	2

You have indicated a total collection size (including future desired growth) of:

56,066

As a point of general reference, many public libraries offer collections of approximately 3 to 4 volumes per capita in the service area. Based on the design population calculation performed above, this would translate into between:

36,796 and

49,062 volumes

The overall size of a library facility is affected by the degree of user-friendliness that is desired. For example, a library could be deisgned to meet the minimum clearance guidelines of the Americans with Disabilities Act (ADA) or it could be designed to create a spacious "living room" atmosphere.

If money were no object, most library planners would choose to maximize the users' experience by making the entire library as user-friendly as possible. Using lower-height shelving units, providing wider aisles between ranges of shelves, and offering more spacious seating areas and larger computer workstations are examples of design decisions that might be made. However money usually ***IS*** an important factor. Consequently, achieving the right balance between user-friendliness and cost is usually essential.

This planning tool takes the approach that these kinds of decisions shouldn't fall into the all-or-nothing category! It allows for the application of various degrees of user-friendliness to different functional areas of the library. Separate choices can be made regarding the desired degree of user-friendliness for shelving areas, seating areas, computer/technology areas, and staff areas. In each instance, the basic level of user-friendliness is called **"Minimum Acceptable User-Friendliness."** This level meets all ADA requirements and applies widely accepted professional standards to ensure efficient operation and to guarantee that spaces do not feel overly crowded. A second level, **"Moderate User-Friendliness"** applies larger unit measures to achieve an enhanced user experience. A third level is characterized as **"Ample User-Friendliness."** This level is characterized by spacious aisles, larger casual and study seating areas, and computer workstations with greater privacy and more expansive space for spreading user materials. Finally, we have provided a fourth level, which is characterized as "Hyper User-Friendliness." This can be considered as the **IDEAL** level and it often involves the use of alternative furnishings. For example, a children's area that is **"Hyper User-Friendliness"** adds additional qualities intended to enhance the user-experience and staff-efficiency. At the Hyper User-Friendliness level, browser bins are widely used instead of shelving for pre-school materials and many non-print items. DVDs are generally housed in browser shelving inserts instead of on regular shelves. Self contained study pods might be substituted for traditional casual or study seating and computer workstations might be large enough to accommodate two people working together. By adjusting the level of user-friendliness applied in the various functional categories, you can determine the impact of applying different priorities to the user-friendliness of collection areas, seating, areas, etc. More in-depth descriptions accompany each choice called for below.

COLLECTION USER FRIENDLINESS

MINIMUM ACCEPTABLE USER-FRIENDLINESS IN COLLECTION AREAS	ADA-Compliant aisles (36"+ - normally 40") between stacks and 48" end aisles, traditional shelf heights (up to 84" in adult areas), ranges up to 6 sections long, most shelves used, minimum acceptable percentage shelf-loading (usually 85%)
MODERATE USER-FRIENDLINESS IN COLLECTION AREAS	42"aisles (48" end aisles), moderate shelf heights, ranges up to 5 sections long, most bottom shelves empty (except in Children's area), moderate percentage shelf loading (usually 80%)
AMPLE USER-FRIENDLINESS IN COLLECTION AREAS	48" aisles (and end aisles), low sheving heights, stack ranges no longer than 4 sections long, most bottom shelves empty (except in Children's area), ample space for reshelving on each shelf (usually 75% shelf-loading) , most pre-school children's items and non-print media in shelving units (as opposed to browser bins).
HYPER USER-FRIENDLINESS IN COLLECTION AREAS	52" aisles (and end aisles), low sheving heights, stack ranges no longer than 3 sections long, most bottom shelves empty (except in Children's area), ample space for reshelving on each shelf (usually 70% shelf-loading) , browser bins for pre-school materials and most non-print/ media items.
SELECT Desired level of user-friendliness of adult collections ▶▶▶	**Moderate User-Friendliness**
SELECT Desired level of user-friendliness of children's collections ▶▶▶	**Moderate User-Friendliness**
SELECT Desired level of user-friendliness of young adult collections >>> ▶▶▶	**Moderate User-Friendliness**

PUBLIC SEATING	
CASUAL AND STUDY SEATING USER-FRIENDLINESS	
MINIMUM ACCEPTABLE USER-FRIENDLINESS OF CASUAL & STUDY SEATING	Traditional sized adult casual seating and adult study area seating (such as 4-top tables). Traditional (relatively small) children's and teen casual seating and appropriate-height for relatively small study seating (usually 4-top tables) for children, and teens.
MODERATE USER-FRIENDLINESS OF CASUAL & STUDY SEATING	Somewhat enhanced comfort in casual seating areas (larger chairs) for adults, children, and teens/ young adults. Greater privacy in study areas (more table surface per user), some enclosed tutoring space(s).
AMPLE USER-FRIENDLINESS	Comfortable casual spaces with somewhat larger easy chairs in adult areas. NO large (4-top or larger) study tables. Two-person study tables with adequate space between tables to afford good privacy. Some non-traditional study and casual seating for teens and children. At least one enclosed group study space in addition to at least one tutoring space.
HYPER USER-FRIENDLINESS OF CASUAL & STUDY SEATING	Living room feel in casual seating areas with large easy chairs and occasional tables in adult areas. Greater privacy in study areas (individual and two-person tables with more space between tables). Innovative study seating such as pods or booths for teens, multiple enclosed group study areas in addition to tutoring spaces, multi-generational seating in children's area, highly creative seating for children and teens.
SELECT Desired Seating Distribution	Default settings are 60% Adult, 30% Children's, and 10% Teen/Young Adult
SELECT Desired Percentage Adult Seating	50%
SELECT Desired Percentage Children's Seating	40%
SELECT Desired Percentage Young Adult Seating	10%
TOTAL PERCENTAGE SHOULD EQUAL 100%	100%
SELECT Desired Level of User-Friendliness of Adult Seating ▶▶▶	Moderate User-Friendliness
SELECT Desired Level of User-Friendliness of Children's Seating ▶▶▶	Moderate User-Friendliness
SELECT Desired Level of User-Friendliness of Teen Seating ▶▶▶	Moderate User-Friendliness

COMPUTER SEATING USER-FRIENDLINESS	
MINIMUM ACCEPTABLE USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Traditional single-user public-access computer workstations for adults, children, and teens.
MODERATE USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Moderate computer workstations with privacy dividers and some additional space to spread out work for adults and teens. Single-user workstations for children.
AMPLE USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Somewhat larger computer workstations with privacy dividers and additional space to spread out work for adults and teens. Approximately 20% of adult workstations suitable for two individuals to work together. Double-sized workstations for children (space for 2 children or an adult and child to work together).
HYPER USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Large computer workstations with privacy dividers and space to spread out work for adults and teens. Some double workstations for adults (space for multiple users to work together); at least half double-sized workstations for teens (space for 2 teens to work together); and all double-sized workstations for children (space for 2 children or an adult and child to work together). Booth-style group computer space for teens. Laptop bar space for plugging in and using user-owned devices.
SELECT Desired Level of User-Friendliness of Adult Computer Workstations ▶▶▶	Moderate User-Friendliness
SELECT Desired Level of User-Friendliness of Children's Computer Workstations ▶▶▶	Moderate User-Friendliness
SELECT Desired Level of User-Friendliness of Teen Computer Workstations ▶▶▶	Moderate User-Friendliness
ENTER Desired Number of Adult Desktop Computer and Technology Workstations **Include special purpose workstations such as microfilm units, units for visually impaired, as well as printer and scanner stations.** ▶▶▶	8
ENTER Desired Number of Children's Desktop Early Literacy/ Educational Game Computer Workstations ▶▶▶	4
ENTER Desired Number of Young Adult Desktop Computer Workstations ▶▶▶	0
ENTER Desired Number of Laptop Bar Stations ▶▶▶	3

STAFF SPACES	
MINIMUM ACCEPTABLE USER-FRIENDLINESS OF STAFF WORK SPACES	Acceptable private office space(s), public service desk positions and staff workstation sizes.
MODERATE USER-FRIENDLINESS OF STAFF WORK SPACES	Moderately-sized private office space(s), public service desk positions and, "back-of-the-house" staff workstation areas.
AMPLE USER-FRIENDLINESS OF STAFF WORK SPACES	Large private office space(s), public service desk positions and, "back-of-the-house" staff workstation areas as well as some shared work areas (such as work islands).
HYPER USER-FRIENDLINESS OF STAFF WORK SPACES	Spacious private office space(s), public service desk positions and, "back-of-the-house" staff workstations and shared work areas (such as work islands).
SELECT Desired Level of User-Friendliness of staff work spaces **(Defaults to Minimum Acceptable User-Friendliness)** ▶▶▶	**Moderate User-Friendliness**
ENCLOSED PERSONAL OFFICES	
The space needs calculator assumes providing an enclosed office for the library director and one circulation desk workstation.	
ENTER Desired number of **ADDITIONAL** enclosed offices ▶▶▶	1
ENTER Desired number of service stations at circulation desk **(Defaults to 1)** ▶▶▶	3
OTHER PUBLIC SERVICE DESK WORKSTATIONS	
The library may or may not need additional public service desks. If the desk specified below is not required, please enter "0." **NOTE: Do not include "behind the scenes" staff workspaces. This is calculated automatically.**	
ENTER Desired number of service stations at reference information desk ▶▶▶	0
ENTER Desired number of service stations at children's desk ▶▶▶	2
ENTER Desired number of service stations at young adult/teen desk ▶▶▶	0
ENTER Desired number of workstations at other public service desks ▶▶▶	0

MEETING AND GATHERING SPACE

Meeting and Gathering Space needs vary significantly from one community to another depending on factors such as programming needs, services offered, and the availability of alternate accessible meeting spaces in the community. Enter the approximate number of seats desired for each of the following types of meeting and gathering spaces. A zero choice indicates that the specified type of space is not needed. All-purpose meeting room seating should reflect "theater-style" (chairs in rows) seating. Capacity of these rooms with table seating would be less.

ENTER Desired Number of Seats - Conference Room #1	▶▶▶	15
ENTER Desired Number of Seats - Conference Room #2	▶▶▶	0
ENTER Desired Number of Seats - All-Purpose Meeting Room #1	▶▶▶	75
ENTER Desired Number of Seats - All-Purpose Meeting Room #2	▶▶▶	0
ENTER Desired Number of Seats - Children's Program Area	▶▶▶	20
ENTER Desired Number of Seats - Children's Craft Area	▶▶▶	0
ENTER Desired Number of Occupants - Children's Creative Play Space	▶▶▶	15
ENTER Desired Number of Seats - Maker Space	▶▶▶	12
ENTER Desired Number of Seats - Computer Lab	▶▶▶	0
ENTER Desired Number of Seats - Tutoring Space(s)	▶▶▶	8
ENTER Desired Number of Seats - Group Study Space(s)	▶▶▶	6
ENTER Desired Number of Seats - Other Meeting Space # 1	▶▶▶	0
ENTER Desired Number of Seats - Other Meeting Space # 2	▶▶▶	0

SPECIAL USE SPACES

Special use spaces are areas that are not specifically required for the operation of basic library services but encourage or enhance library use. Amenities such as a cafe or coffee bar, an art gallery, a Friends' book sale area, a Friends' book/gift shop, or a Friends' book sorting area, or an office or offices of a related agency (such as a literacy group) are examples of special use spaces.

Please select YES or NO in response to the questions below.

SELECT Do you want to include a small coffee bar?	▶▶▶	Yes
SELECT Do you want to include a cafe?	▶▶▶	No
SELECT Do you want to include an art gallery?	▶▶▶	No
SELECT Do you want to include a Friends' book sale area?	▶▶▶	Yes
SELECT Do you want to include a Friends' book/ gift shop?	▶▶▶	No
SELECT Do you want to include a Friends' book sorting area?	▶▶▶	Yes
SELECT Do you want to include space for an Automated Materials Handling (AMH) system (RFID sorter)?	▶▶▶	Yes

MISCELLANEOUS SPACES

Miscellaneous spaces are exactly that: functional spaces that are necessary but that don't fit nicely into any particular category. Please note that space for restrooms, mechanical systems, stairwells, and other "non-assignable" categories will be added in the separate "Structural Spaces/ Non-Assignable Spaces" section that follows this "Miscellaneous Spaces" section. Note also that allowances for an entrance lobby, a service entrance, and non-custodial storage rooms will be calculated and added automatically based on the overall size of the building.

ENTER How many self checkout units do you want?	▶▶▶	2
ENTER How many public copy machines do you want?	▶▶▶	2
ENTER How many dictionary stands (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many atlas stands (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many map cases (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many microfilm cabinets (if any) do you wish to include in the public areas?	▶▶▶	0

MISCELLANEOUS SPACES

Miscellaneous spaces are exactly that: functional spaces that are necessary but that don't fit nicely into any particular category. Please note that space for restrooms, mechanical systems, stairwells, and other "non-assignable" categories will be added in the separate "Structural Spaces/ Non-Assignable Spaces" section that follows this "Miscellaneous Spaces" section. Note also that allowances for an entrance lobby, a service entrance, and non-custodial storage rooms will be calculated and added automatically based on the overall size of the building.

ENTER How many self checkout units do you want?	▶▶▶	2
ENTER How many public copy machines do you want?	▶▶▶	2
ENTER How many dictionary stands (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many atlas stands (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many map cases (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many microfilm cabinets (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many vertical file cabinets (if any) do you wish to include in the public areas? (Do not include those that are for staff use at service desks.)	▶▶▶	0
ENTER How many lateral file cabinets (if any) do you wish to include in the public area? (Do not include those that are for staff use at service desks.)	▶▶▶	0
ENTER How many "hoteling/ coworking" office spaces (if any) do you wish to include?	▶▶▶	0
ENTER How many offices for other organizations or agencies (if any) do you wish to include?	▶▶▶	0

STRUCTURAL SPACES/ NON-ASSIGNABLE SPACES

There are two types of spaces in any facility that must be built (and paid for) that are not included in the kind of functional calculations that are reflected above. The first is "structural space." Exterior walls, permanent interior walls/ partitions, and supporting columns are examples of this kind of space that is not available for public use. Non-assignable spaces are additional areas that are not available for assignment to an occupant for specific use but that are necessary for the operation of the building. Space occupied by stairwells (counted separately for each floor), elevators (again counted separately for each floor), restrooms, mechanical and custodial rooms, and computer/ data wiring closets are examples of these kinds of spaces.

For purposes of creating an initial estimate of space needs, structural space and non-assignable space is typically accounted for in two ways. First, a specific space allocation is added to reflect space needed for "vertical transportation" (a fancy way of saying space for an elevator and stairwells required by building/ fire codes. Second, a percentage is added on to the total of needed functional spaces that have been identiified to accommodate restrooms, mechanical space, structural members, etc. A larger percentage is typically required for renovation projects than for projects that are newly designed, so the percentage is increased if a project is going to involve a renovation of space. Finally, smaller buildings usually require a higher allocation of structural/ non-assignable space than larger facilities due to economies of scale. Therefore, the percentage applied is automatically increased if the total square footage of the facility is under 10,000 Gross Square Feet.

Please enter 1 for YES or 2 for NO in response to the questions below.

ENTER Is the anticipated project in part or wholly a renovation project?	▶▶▶	No
ENTER Is the anticipated project likely to have more than a single floor?	▶▶▶	No

NOTE: **A determination as to whether to increase or decrease the percentage applied will be made based on an estimate of the total functional square footage that is calculated. This adjustment will be made automatically.**

STRUCTURAL SPACE/ NON-ASSIGNABLE SPACE PERCENTAGE APPLIED	***25 %***

ESTIMATED TOTAL SPACE NEED	***19,965 GSF***

E / 20-YEAR POPULATION GROWTH SUMMARY

SUMMARY OF ESTIMATED SPACE NEEDS - FEH DESIGN

BASIC INFORMATION	
Library Name	Le Mars Public Library
Year Space Needs Analysis Performed	2022
Space Needs Calculation Target Year	2042
Design Population Applied	12,265

COLLECTION SPACES	Square Footage
Adult Collection Space Required	2,419
Children's Collection Space Required	1,479
Young Adult Collection Space Required	327
TOTAL COLLECTION SPACE REQUIRED	***4,226***

SEATING SPACES	User Seats	Square Footage
Recommended Total User Seating Base (not including computer or meeting room seating). NOTE: Total number of seats may differ from sum of counts for individual areas due to rounding.	**81**	
CASUAL AND STUDY SEATING		
Adult Casual and Study Seating Suggested Based on Population Served	40	1,412
Children's Casual and Study Seating Suggested Based on Population Served	32	807
Young Adult Casual and Study Seating Suggested Based on Population Served	8	282
TOTAL CASUAL AND STUDY SEATING REQUIRED		**2,502**
COMPUTER/ TECHNOLOGY SEATING	**Computer Seats**	**Square Footage**
Adult Desktop Computer Workstations	8	320
Children's Desktop/ Early Literacy/ Educational Game Workstations	4	140
Young Adult Desktop Computer Workstations	0	-
Laptop Bar Stations	3	72
TOTAL COMPUTER/ TECHNOLOGY SPACE REQUIRED		**532**
TOTAL USER SEATING SPACE REQUIRED		***3,034***

STAFF SPACES	Square Footage
Director's Office	190
Other Enclosed Offices	170
Circulation Workstations	480
Reference/ Information Desk Workstation(s)	0
Children's Service Desk Workstation(s)	290
Young Adult Service Desk Workstation(s)	0
Other Service Desks	0
General Staff Workspace	1400
Staff Lunch/ Break Room	420
TOTAL STAFF WORKSPACE REQUIRED	***2,950***

MEETING AND GATHERING SPACES	Occupancy	Square Footage
Conference Room #1	15	510
Conference Room #2	0	-
All-Purpose Room #1	75	1,125
All-Purpose Room #2	0	-
Children's Program Area	20	340
Children's Craft Area	0	-
Children's Creative Play Space	15	300
Maker Space	12	460
Computer Lab	0	-
Tutoring Space(s)	8	330
Group Study Space(s)	6	260
Other Meeting Space #1	0	-
Other Meeting Space #2	0	-
TOTAL MEETING & GATHERING SPACE		***3,325***

SPECIAL USE SPACES	Square Footage
Coffee Bar	64
Café	-
Art Gallery	-
Friends' Book Sale Area	68
Friends' Gift Shop	-
Friends' Office/ Book Sorting Area	677
Co-Working Space	-
Office for another organization/ agency	-
AMH (RFID) sorting equipment	262
TOTAL SPECIAL USE SPACES	***1,071***

MISCELLANEOUS SPACES	
Space for areas such as restrooms, mechanical rooms, janitorial storage are included in the percentage that is applied in the Structural Space/ Non-Assignable Space category. However, there are some some important spaces that are not included in the functional categories above that are important to library operations. These are broken out below.	
	Square Footage
Self Checkout Unit(s)	120
Copy Machine(s)	100
Dictionary Stand(s)	0
Atlas Stand(s)	0
Map Case(s)	0
Microform Cabinet(s)	0
Vertical File Cabinet(s)	0
Lateral File Cabinet(s)	0
TOTAL MISCELLANEOUS SPACES	***220***

UNCATEGORIZED SPACE	
	Square Footage
Supply Storage	118
General Storage	441
Entrance Lobby(ies)	441
Service/ Loading Entrance	147
TOTAL UNCATEGORIZED SPACE	***1,147***

TOTAL FUNCTIONAL SPACE	***15,972***
STRUCTURAL SPACE/ NON-ASSIGNABLE SPACE PERCENTAGE APPLIED	**25 %**
GRAND TOTAL ESTIMATED TOTAL SPACE NEED (GROSS SQUARE FEET)	***19,965 GSF***

F / IDEAL 20-YEAR GROWTH INPUT

LIBRARY SPACE NEEDS ESTIMATOR - FEH DESIGN

This ***Library Space Needs Estimator*** is intended to provide an initial assessment of how much library space a community needs. It is not intended to be a replacement for more in-depth space planning.

Please enter information in the black-shaded boxes. Lines that require responses are also indentified by the word **ENTER or SELECT** in **violet** as well as a description of the data/information that is required in the black boxes. Items marked **ENTER** require direct entry of data (type in the answer). Those marked with the word **SELECT** require the selction of an answer from a drop-down menu. Click on the arrow that will appear next to the black box to access the drop-down data. Grey-shaded boxes provide instructions or information to assist you in filling out the form.

BASIC INFORMATION		
ENTER Library Name ▶▶▶		Le Mars Public Library
SELECT Current Year (XXXX) ▶▶▶		2022
ENTER Today's Date ▶▶▶		8/16/22
ENTER Scenario Description ▶▶▶		Future Ideal Scenario
DESIGN POPULATION		
ENTER Basic Population Served (Home Community) ▶▶▶		10,572
SELECT 10-Year Percentage Anticipated Growth (Home Community) ▶▶▶		4%
Home Community 10-Year Population Projection	2032	10,995
ENTER Extended Service Population (Additional Population Served) ▶▶▶		1,500
SELECT 10-Year Percentage Anticipated Growth (Extended Community) ▶▶▶		3%
Extended Community 10-Year Population Projection	2032	1,545
Combined 10-Year Design Population Projection	2032	12,540
SELECT Long-Term Anticipated Percentage Growth (Year 11 - 20) ▶▶▶		2%
FINAL DESIGN POPULATION APPLIED TO CALCULATIONS	2042	12,791

STAFF	
ENTER Total Number of Library Staff (Full-Time Equivalents) ▶▶▶	7.500
ENTER Total Number of Library Staff (TOTAL Number of PEOPLE - full-time and part-time) ▶▶▶	16

COLLECTIONS

Communities currently served by libraries that are severely undersized or that are experiencing significant growth in population may wish to plan for larger collections than they have at the present time. Please enter below the overall percentage growth you believe is desirable for adult, children's, and young adult collections. **NOTE: Recognize that collection expansion comes with a cost both in terms of purchasing new materials and building a facility adequate to house the materials. Consider whether it is likely that your funding will support significant expansion.**

SELECT Desired Percentage growth of ADULT collections	▶▶▶	50%
SELECT Desired Percentage growth of CHILDREN'S collections	▶▶▶	75%
SELECT Desired Percentage growth of YOUNG ADULT collections	▶▶▶	50%

ADULT COLLECTIONS

ENTER current number of volumes in the **ADULT** general collection (books and audiobooks) **Include all ADULT books AND AUDIOBOOKS**	▶▶▶	16,367
ENTER current number of **ADULT** DVDs, Music CD and other media collections except audiobooks **Do NOT include AUDIOBOOKS (Include them with books above)**	▶▶▶	3,630
ENTER current number of **ADULT** magazine and newspaper **TITLES**		65

CHILDREN'S COLLECTIONS

ENTER current number of **PRE-SCHOOL** (picture books, easy readers, board books) volumes	▶▶▶	6,876
ENTER current number of general **CHILDREN'S** (j fiction, j non-fiction, chapter books and **AUDIOBOOKS**) volumes	▶▶▶	5,850
ENTER current number of **CHILDREN'S** DVDs, Music CDs and other media collections except audiobooks	▶▶▶	1,189
ENTER current number of **CHILDREN'S** magazine and newspaper **TITLES**	▶▶▶	5

YOUNG ADULT COLLECTIONS

ENTER current number of **TEEN/ YOUNG ADULT** volumes (all types)	▶▶▶	2,339
ENTER current number of **TEEN/ YOUNG ADULT** magazine and newspaper **TITLES**	▶▶▶	2

You have indicated a total collection size (including future desired growth) of:

57,855

As a point of general reference, many public libraries offer collections of approximately 3 to 4 volumes per capita in the service area. Based on the design population calculation performed above, this would translate into between:

38,372 and

51,163 volumes

The overall size of a library facility is affected by the degree of user-friendliness that is desired. For example, a library could be deisgned to meet the minimum clearance guidelines of the Americans with Disabilities Act (ADA) or it could be designed to create a spacious "living room" atmosphere.

If money were no object, most library planners would choose to maximize the users' experience by making the entire library as user-friendly as possible. Using lower-height shelving units, providing wider aisles between ranges of shelves, and offering more spacious seating areas and larger computer workstations are examples of design decisions that might be made. However money usually ***IS*** an important factor. Consequently, achieving the right balance between user-friendliness and cost is usually essential.

This planning tool takes the approach that these kinds of decisions shouldn't fall into the all-or-nothing category! It allows for the application of various degrees of user-friendliness to different functional areas of the library. Separate choices can be made regarding the desired degree of user-friendliness for shelving areas, seating areas, computer/technology areas, and staff areas. In each instance, the basic level of user-friendliness is called **"Minimum Acceptable User-Friendliness."** This level meets all ADA requirements and applies widely accepted professional standards to ensure efficient operation and to guarantee that spaces do not feel overly crowded. A second level, **"Moderate User-Friendliness"** applies larger unit measures to achieve an enhanced user experience. A third level is characterized as **"Ample User-Friendliness."** This level is characterized by spacious aisles, larger casual and study seating areas, and computer workstations with greater privacy and more expansive space for spreading user materials. Finally, we have provided a fourth level, which is characterized as "Hyper User-Friendliness." This can be considered as the **IDEAL** level and it often involves the use of alternative furnishings. For example, a children's area that is **"Hyper User-Friendliness"** adds additional qualities intended to enhance the user-experience and staff-efficiency. At the Hyper User-Friendliness level, browser bins are widely used instead of shelving for pre-school materials and many non-print items. DVDs are generally housed in browser shelving inserts instead of on regular shelves. Self contained study pods might be substituted for traditional casual or study seating and computer workstations might be large enough to accommodate two people working together. By adjusting the level of user-friendliness applied in the various functional categories, you can determine the impact of applying different priorities to the user-friendliness of collection areas, seating, areas, etc. More in-depth descriptions accompany each choice called for below.

COLLECTION USER FRIENDLINESS

MINIMUM ACCEPTABLE USER-FRIENDLINESS IN COLLECTION AREAS	ADA-Compliant aisles (36"+ - normally 40") between stacks and 48" end aisles, traditional shelf heights (up to 84" in adult areas), ranges up to 6 sections long, most shelves used, minimum acceptable percentage shelf-loading (usually 85%)
MODERATE USER-FRIENDLINESS IN COLLECTION AREAS	42"aisles (48" end aisles), moderate shelf heights, ranges up to 5 sections long, most bottom shelves empty (except in Children's area), moderate percentage shelf loading (usually 80%)
AMPLE USER-FRIENDLINESS IN COLLECTION AREAS	48" aisles (and end aisles), low sheving heights, stack ranges no longer than 4 sections long, most bottom shelves empty (except in Children's area), ample space for reshelving on each shelf (usually 75% shelf-loading) , most pre-school children's items and non-print media in shelving units (as opposed to browser bins).
HYPER USER-FRIENDLINESS IN COLLECTION AREAS	52" aisles (and end aisles), low sheving heights, stack ranges no longer than 3 sections long, most bottom shelves empty (except in Children's area), ample space for reshelving on each shelf (usually 70% shelf-loading) , browser bins for pre-school materials and most non-print/ media items.

SELECT Desired level of user-friendliness of adult collections	▶▶▶	**Moderate User-Friendliness**
SELECT Desired level of user-friendliness of children's collections	▶▶▶	**Ample User-Friendliness**
SELECT Desired level of user-friendliness of young adult collections >>>	▶▶▶	**Ample User-Friendliness**

PUBLIC SEATING	
CASUAL AND STUDY SEATING USER-FRIENDLINESS	
MINIMUM ACCEPTABLE USER-FRIENDLINESS OF CASUAL & STUDY SEATING	Traditional sized adult casual seating and adult study area seating (such as 4-top tables). Traditional (relatively small) children's and teen casual seating and appropriate-height for relatively small study seating (usually 4-top tables) for children, and teens.
MODERATE USER-FRIENDLINESS OF CASUAL & STUDY SEATING	Somewhat enhanced comfort in casual seating areas (larger chairs) for adults, children, and teens/ young adults. Greater privacy in study areas (more table surface per user), some enclosed tutoring space(s).
AMPLE USER-FRIENDLINESS	Comfortable casual spaces with somewhat larger easy chairs in adult areas. NO large (4-top or larger) study tables. Two-person study tables with adequate space between tables to afford good privacy. Some non-traditional study and casual seating for teens and children. At least one enclosed group study space in addition to at least one tutoring space.
HYPER USER-FRIENDLINESS OF CASUAL & STUDY SEATING	Living room feel in casual seating areas with large easy chairs and occasional tables in adult areas. Greater privacy in study areas (individual and two-person tables with more space between tables). Innovative study seating such as pods or booths for teens, multiple enclosed group study areas in addition to tutoring spaces, multi-generational seating in children's area, highly creative seating for children and teens.
SELECT Desired Seating Distribution	Default settings are 60% Adult, 30% Children's, and 10% Teen/Young Adult
SELECT Desired Percentage Adult Seating	60%
SELECT Desired Percentage Children's Seating	45%
SELECT Desired Percentage Young Adult Seating	10%
TOTAL PERCENTAGE SHOULD EQUAL 100%	115%
SELECT Desired Level of User-Friendliness of Adult Seating ▶▶▶	Moderate User-Friendliness
SELECT Desired Level of User-Friendliness of Children's Seating ▶▶▶	Ample User-Friendliness
SELECT Desired Level of User-Friendliness of Teen Seating ▶▶▶	Hyper User-Friendliness

COMPUTER SEATING USER-FRIENDLINESS	
MINIMUM ACCEPTABLE USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Traditional single-user public-access computer workstations for adults, children, and teens.
MODERATE USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Moderate computer workstations with privacy dividers and some additional space to spread out work for adults and teens. Single-user workstations for children.
AMPLE USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Somewhat larger computer workstations with privacy dividers and additional space to spread out work for adults and teens. Approximately 20% of adult workstations suitable for two individuals to work together. Double-sized workstations for children (space for 2 children or an adult and child to work together).
HYPER USER-FRIENDLINESS OF COMPUTER WORKSTATIONS	Large computer workstations with privacy dividers and space to spread out work for adults and teens. Some double workstations for adults (space for multiple users to work together); at least half double-sized workstations for teens (space for 2 teens to work together); and all double-sized workstations for children (space for 2 children or an adult and child to work together). Booth-style group computer space for teens. Laptop bar space for plugging in and using user-owned devices.
SELECT Desired Level of User-Friendliness of Adult Computer Workstations ▶▶▶	Hyper User-Friendliness
SELECT Desired Level of User-Friendliness of Children's Computer Workstations ▶▶▶	Ample User-Friendliness
SELECT Desired Level of User-Friendliness of Teen Computer Workstations ▶▶▶	
ENTER Desired Number of Adult Desktop Computer and Technology Workstations **Include special purpose workstations such as microfilm units, units for visually impaired, as well as printer and scanner stations.** ▶▶▶	6
ENTER Desired Number of Children's Desktop Early Literacy/ Educational Game Computer Workstations ▶▶▶	4
ENTER Desired Number of Young Adult Desktop Computer Workstations ▶▶▶	0
ENTER Desired Number of Laptop Bar Stations ▶▶▶	0

STAFF SPACES	
MINIMUM ACCEPTABLE USER-FRIENDLINESS OF STAFF WORK SPACES	Acceptable private office space(s), public service desk positions and staff workstation sizes.
MODERATE USER-FRIENDLINESS OF STAFF WORK SPACES	Moderately-sized private office space(s), public service desk positions and, "back-of-the-house" staff workstation areas.
AMPLE USER-FRIENDLINESS OF STAFF WORK SPACES	Large private office space(s), public service desk positions and, "back-of-the-house" staff workstation areas as well as some shared work areas (such as work islands).
HYPER USER-FRIENDLINESS OF STAFF WORK SPACES	Spacious private office space(s), public service desk positions and, "back-of-the-house" staff workstations and shared work areas (such as work islands).
SELECT Desired Level of User-Friendliness of staff work spaces **(Defaults to Minimum Acceptable User-Friendliness)** ▶▶▶	**Ample User-Friendliness**
ENCLOSED PERSONAL OFFICES	
The space needs calculator assumes providing an enclosed office for the library director and one circulation desk workstation.	
ENTER Desired number of **ADDITIONAL** enclosed offices ▶▶▶	**2**
ENTER Desired number of service stations at circulation desk **(Defaults to 1)** ▶▶▶	**5**
OTHER PUBLIC SERVICE DESK WORKSTATIONS	
The library may or may not need additional public service desks. If the desk specified below is not required, please enter "0." **NOTE: Do not include "behind the scenes" staff workspaces. This is calculated automatically.**	
ENTER Desired number of service stations at reference information desk ▶▶▶	**0**
ENTER Desired number of service stations at children's desk ▶▶▶	**1**
ENTER Desired number of service stations at young adult/teen desk ▶▶▶	**1**
ENTER Desired number of workstations at other public service desks ▶▶▶	**0**

MEETING AND GATHERING SPACE

Meeting and Gathering Space needs vary significantly from one community to another depending on factors such as programming needs, services offered, and the availability of alternate accessible meeting spaces in the community. Enter the approximate number of seats desired for each of the following types of meeting and gathering spaces. A zero choice indicates that the specified type of space is not needed. All-purpose meeting room seating should reflect "theater-style" (chairs in rows) seating. Capacity of these rooms with table seating would be less.

ENTER Desired Number of Seats - Conference Room #1	▶▶▶	12
ENTER Desired Number of Seats - Conference Room #2	▶▶▶	0
ENTER Desired Number of Seats - All-Purpose Meeting Room #1	▶▶▶	60
ENTER Desired Number of Seats - All-Purpose Meeting Room #2	▶▶▶	40
ENTER Desired Number of Seats - Children's Program Area	▶▶▶	50
ENTER Desired Number of Seats - Children's Craft Area	▶▶▶	0
ENTER Desired Number of Occupants - Children's Creative Play Space	▶▶▶	12
ENTER Desired Number of Seats - Maker Space	▶▶▶	12
ENTER Desired Number of Seats - Computer Lab	▶▶▶	0
ENTER Desired Number of Seats - Tutoring Space(s)	▶▶▶	9
ENTER Desired Number of Seats - Group Study Space(s)	▶▶▶	6
ENTER Desired Number of Seats - Other Meeting Space # 1	▶▶▶	0
ENTER Desired Number of Seats - Other Meeting Space # 2	▶▶▶	0

SPECIAL USE SPACES

Special use spaces are areas that are not specifically required for the operation of basic library services but encourage or enhance library use. Amenities such as a cafe or coffee bar, an art gallery, a Friends' book sale area, a Friends' book/gift shop, or a Friends' book sorting area, or an office or offices of a related agency (such as a literacy group) are examples of special use spaces.

Please select YES or NO in response to the questions below.

SELECT Do you want to include a small coffee bar?	▶▶▶	No
SELECT Do you want to include a cafe?	▶▶▶	No
SELECT Do you want to include an art gallery?	▶▶▶	No
SELECT Do you want to include a Friends' book sale area?	▶▶▶	Yes
SELECT Do you want to include a Friends' book/ gift shop?	▶▶▶	No
SELECT Do you want to include a Friends' book sorting area?	▶▶▶	Yes
SELECT Do you want to include space for an Automated Materials Handling (AMH) system (RFID sorter)?	▶▶▶	Yes

MISCELLANEOUS SPACES

Miscellaneous spaces are exactly that: functional spaces that are necessary but that don't fit nicely into any particular category. Please note that space for restrooms, mechanical systems, stairwells, and other "non-assignable" categories will be added in the separate "Structural Spaces/ Non-Assignable Spaces" section that follows this "Miscellaneous Spaces" section. Note also that allowances for an entrance lobby, a service entrance, and non-custodial storage rooms will be calculated and added automatically based on the overall size of the building.

ENTER How many self checkout units do you want?	▶▶▶	2
ENTER How many public copy machines do you want?	▶▶▶	1
ENTER How many dictionary stands (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many atlas stands (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many map cases (if any) do you wish to include in the public areas?	▶▶▶	0
ENTER How many microfilm cabinets (if any) do you wish to include in the public areas?	▶▶▶	3
ENTER How many vertical file cabinets (if any) do you wish to include in the public areas? (Do not include those that are for staff use at service desks.)	▶▶▶	0
ENTER How many lateral file cabinets (if any) do you wish to include in the public area? (Do not include those that are for staff use at service desks.)	▶▶▶	0
ENTER How many "hoteling/ coworking" office spaces (if any) do you wish to include?	▶▶▶	0
ENTER How many offices for other organizations or agencies (if any) do you wish to include?	▶▶▶	0

STRUCTURAL SPACES/ NON-ASSIGNABLE SPACES

There are two types of spaces in any facility that must be built (and paid for) that are not included in the kind of functional calculations that are reflected above. The first is "structural space." Exterior walls, permanent interior walls/ partitions, and supporting columns are examples of this kind of space that is not available for public use. Non-assignable spaces are additional areas that are not available for assignment to an occupant for specific use but that are necessary for the operation of the building. Space occupied by stairwells (counted separately for each floor), elevators (again counted separately for each floor), restrooms, mechanical and custodial rooms, and computer/ data wiring closets are examples of these kinds of spaces.

For purposes of creating an initial estimate of space needs, structural space and non-assignable space is typically accounted for in two ways. First, a specific space allocation is added to reflect space needed for "vertical transportation" (a fancy way of saying space for an elevator and stairwells required by building/ fire codes. Second, a percentage is added on to the total of needed functional spaces that have been identiified to accommodate restrooms, mechanical space, structural members, etc. A larger percentage is typically required for renovation projects than for projects that are newly designed, so the percentage is increased if a project is going to involve a renovation of space. Finally, smaller buildings usually require a higher allocation of structural/ non-assignable space than larger facilities due to economies of scale. Therefore, the percentage applied is automatically increased if the total square footage of the facility is under 10,000 Gross Square Feet.

Please enter 1 for YES or 2 for NO in response to the questions below.

ENTER Is the anticipated project in part or wholly a renovation project?	▶▶▶	No
ENTER Is the anticipated project likely to have more than a single floor?	▶▶▶	No

NOTE: A determination as to whether to increase or decrease the percentage applied will be made based on an estimate of the total functional square footage that is calculated. This adjustment will be made automatically.

STRUCTURAL SPACE/ NON-ASSIGNABLE SPACE PERCENTAGE APPLIED ***25 %***

ESTIMATED TOTAL SPACE NEED ***25,042 GSF***

G / IDEAL 20-YEAR GROWTH SUMMARY

SUMMARY OF ESTIMATED SPACE NEEDS - FEH DESIGN

BASIC INFORMATION	
Library Name	Le Mars Public Library
Scenario Description	Future Ideal Scenario
Date Scenario Created	8/16/22
Year Space Needs Analysis Performed	2022
Space Needs Calculation Target Year	2042
Design Population Applied	12,791

COLLECTION SPACES	Square Footage
Adult Collection Space Required	2,430
Children's Collection Space Required	2,673
Young Adult Collection Space Required	401
TOTAL COLLECTION SPACE REQUIRED	***5,504***

SEATING SPACES	User Seats	Square Footage
Recommended Total User Seating Base (not including computer or meeting room seating). NOTE: Total number of seats may differ from sum of counts for individual areas due to rounding.	**96**	
CASUAL AND STUDY SEATING		
Adult Casual and Study Seating Suggested Based on Population Served	57	2,008
Children's Casual and Study Seating Suggested Based on Population Served	43	1,291
Young Adult Casual and Study Seating Suggested Based on Population Served	10	430
TOTAL CASUAL AND STUDY SEATING REQUIRED		3,729
COMPUTER/ TECHNOLOGY SEATING	**Computer Seats**	**Square Footage**
Adult Desktop Computer Workstations	6	300
Children's Desktop/ Early Literacy/ Educational Game Workstations	4	160
Young Adult Desktop Computer Workstations	0	-
Laptop Bar Stations	0	-
TOTAL COMPUTER/ TECHNOLOGY SPACE REQUIRED		460
TOTAL USER SEATING SPACE REQUIRED		***4,189***

STAFF SPACES	Square Footage
Director's Office	210
Other Enclosed Offices	360
Circulation Workstations	850
Reference/ Information Desk Workstation(s)	0
Children's Service Desk Workstation(s)	155
Young Adult Service Desk Workstation(s)	110
Other Service Desks	0
General Staff Workspace	1430
Staff Lunch/ Break Room	420
TOTAL STAFF WORKSPACE REQUIRED	***3,535***

MEETING AND GATHERING SPACES	Occupancy	Square Footage
Conference Room #1	12	420
Conference Room #2	0	-
All-Purpose Room #1	60	900
All-Purpose Room #2	40	600
Children's Program Area	50	700
Children's Craft Area	0	-
Children's Creative Play Space	12	240
Maker Space	12	460
Computer Lab	0	-
Tutoring Space(s)	9	365
Group Study Space(s)	6	260
Other Meeting Space #1	0	-
Other Meeting Space #2	0	-
TOTAL MEETING & GATHERING SPACE		***3,945***

SPECIAL USE SPACES	Square Footage
Coffee Bar	-
Café	-
Art Gallery	-
Friends' Book Sale Area	86
Friends' Gift Shop	-
Friends' Office/ Book Sorting Area	859
Co-Working Space	-
Office for another organization/ agency	-
AMH (RFID) sorting equipment	266
TOTAL SPECIAL USE SPACES	***1,210***

MISCELLANEOUS SPACES	
Space for areas such as restrooms, mechanical rooms, janitorial storage are included in the percentage that is applied in the Structural Space/ Non-Assignable Space category. However, there are some some important spaces that are not included in the functional categories above that are important to library operations. These are broken out below.	
	Square Footage
Self Checkout Unit(s)	120
Copy Machine(s)	50
Dictionary Stand(s)	0
Atlas Stand(s)	0
Map Case(s)	0
Microform Cabinet(s)	45
Vertical File Cabinet(s)	0
Lateral File Cabinet(s)	0
TOTAL MISCELLANEOUS SPACES	***215***

UNCATEGORIZED SPACE	
	Square Footage
Supply Storage	141
General Storage	554
Entrance Lobby(ies)	554
Service/ Loading Entrance	185
TOTAL UNCATEGORIZED SPACE	***1,435***

TOTAL FUNCTIONAL SPACE	***20,033***

STRUCTURAL SPACE/ NON-ASSIGNABLE SPACE PERCENTAGE APPLIED	**25 %**

GRAND TOTAL ESTIMATED TOTAL SPACE NEED (GROSS SQUARE FEET)	***25,042 GSF***

COMPARISON

Comparison of the Scenarios

A chart is provided (Exhibit H) that compares each of the three scenarios with existing conditions. As was noted above, only third scenario significantly addresses the library's need for programming space. The information at the top of the chart summarizes the basic assumptions that were used for each of the calculations. The municipal and extended populations applied are shown as well as the size of physical collections and the staffing level. Also shown are the square feet per capita and the volumes per capita that are generated using the population and collection sizes that have been applied.

The 2017 renovation represented a concerted effort to squeeze as much functionality as possible out of the existing footprint. Every effort was made to prioritize public spaces over back-of-house functions. A comparison of current conditions with the existing need scenario reveals deficiencies in three areas. They are: children's collection space, adult and young adult seating, and staff work areas.

The amount of space allocated for the children's collection is barely adequate. The shelving serves the purpose of housing the materials provided, however, not enough space is available to adequately display materials in ways that make them most appealing and accessible. The comparison chart shows that the space devoted to the adult collections is adequate; however it should be noted that the density of book stacks in the adult area (the number of shelving units in a row before an opening) is not ideal in terms of creating a feeling of openness. In other words, the amount of shelving is adequate but not ideal for the current, undersized collections.

A concerted effort was made during the 2017 renovation to include the amount of seating suggested by applying contemporary standards. The issue in regards to adult seating is not so much the number of user seats but the distribution of user seats. Not unlike the situation described for adult shelving, the number of seats is nearly adequate, but the distribution of the seating allocates not much more than the minimum amount of space necessary to comply with the Americans with Disabilities Act guidelines.

As was alluded to previously, library user space was prioritized over staff work space in the 2017 renovation. This shows in the figures presented that compares current space allocation to the existing need. In some ways, the staffing space invites a comparison to the "tiny house" movement. The 2017 renovation squeezed every bit of possible functionality out of the staff space provided; however, it is far short of ideal. Space for circulation and reshelving functions are extremely limited. The director's office is about half the size of what would normally be allocated for a library of this size and other staff work areas are cramped. Space for processing materials and for preparing for programming is totally lacking. It is interesting to note that staff space is one area where the existing deficit and the 20-year deficit is similar. Because it has been assumed that staffing levels will not increase significantly in the long-term, the need for staff space will remain relatively constant into the future.

Comparisons of the existing space allocation to the 20-year future scenarios reveal different sets of deficits. Both forecast a need for significantly more space for collections because both scenarios include a sizeable increase in the sizes of collections based on an effort to achieve a semblance of parity with peer libraries. Seating deficits also increase markedly due primarily to population growth. Remember the mention that the public library serves the public and that there is therefore a relationship between the number of people served and the space that is allocated to serving them.

The other major deficiency revealed in the 20-year comparisons is space for meeting and gathering. Both future scenarios envision the Le Mars Library of the future being more involved in providing a wide array of programs for children of all ages, tweens, teens, adults, seniors and for intergenerational groups. It is extremely unlikely that the current site could accommodate the amount of meeting and gathering space that is envisioned in either of the future scenarios.

A final word should be offered regarding storage space. The comparison of current conditions to the existing need indicates that the storage space available at the present time is nearly adequate. From a statistical perspective. This is true. However, from a practical standpoint, it obscures the fact that the current storage space is far from ideal. The 2017 renovation wisely used existing spaces that did not lend themselves to public use for storage. Nevertheless, the strategic placement of the storage areas and their design are not optimal.

H / SPACE COMPARISONS

Le Mars Iowa	Current Facility	Existing Need	20-Year Population Growth Scenario	Ideal Population Growth Scenario (Group Session)
Assumptions				
Current Municipal Population	10,572	10,572	10,572	10,572
10-Year Municipal Population Estimate	-	-	10,995	10,995
Current Estimated Extended Service Popula	1,000	1,000	1,000	1,500
10-Year Extended Population Estimate	-	-	1,030	1,545
Combined 10-Year Design Population	-	-	12,025	12,540
Population Applied (Current or Combined 20-Year Design Population Estimate)	**11,572**	**11,572**	**12,265**	**12,791**
Adult Collection Size (Physical Volumes)				
Adult Books and Audio Books	16,367	16,367	25,313	24,551
Adult Non-Print/ Media	3,630	3,630	5,615	5,445
Adult Magazine/ Newspaper Titles	65	65	65	65
Children's Collection Size (Physical Volumes)				
Preschool Books	6,876	6,876	10,634	12,033
General Children's Books	5,850	5,850	9,048	10,238
Children's Non-Print/ Media	1,189	1,189	1,839	2,081
Children's Magazine Titles	5	5	5	5
Young Adult Collection Size (Physical Volumes)				
Teen/ Young Adult Books	2,339	2,339	3,617	3,509
Teen/ Young Magazine Titles	2	2	2	2
Total Physical Collection Size	36,251	36,251	56,066	57,855
Staffing Level	6.325 FTE	6.325 FTE	6.325 FTE	7.500 FTE
Per Capita Outcomes				
Square Feet per Capita	0.79	1.08	1.63	1.96
Volumes per Capita	3.13	3.13	4.57	4.52

Continued	Current Facility	Existing Need	20-Year Population Growth Scenario	Ideal Population Growth Scenario (Group Session)
Adult Collection Space	1,584	1,588	2,419	2,430
Children's Collection Space	760	959	1,479	2,673
Young Adult Collection Space	210	213	327	401
Adult Seating	1,070	1,351	1,412	2,008
Children's Seating	760	772	807	1,291
Young Adult Seating	200	270	282	430
Adult Public Computer Seating	260	400	320	300
Children's Public Computer Seating	-	-	140	160
Young Adult Public Computer Seating	-	-	-	-
Laptop Bar Seating	-	-	72	-
Director's Office	96	190	190	210
Other Enclosed Offices	116	170	170	360
Circulation Workstations	340	480	480	850
Reference/Information Desk	-	-	-	-
Children's Service Desk	-	-	290	155
Young Adult Service Desk	-	-	-	110
General Staff Workspace	400	1,400	1,400	1,430
Staff Lunch/Break Room	116	420	420	420
Conference Room		-	510	420
All-Purpose Meeting Room 1	480	450	1,125	900
All-Purpose Meeting Room 2	-	-	-	600
Children's Program Area	-	-	340	700
Children's Creative Play Space	50	-	300	240
Maker Space	-	-	460	460
Tutoring Spaces	160	-	330	365
Group Study Space	-	330	260	260
Coffee Bar	-	-	64	-
Friends' Booksale Area	-	-	68	86
Friends' Storage/Sorting Space	-	-	677	859
Automated Materials Handling Sorter	-	-	262	266

Continued	Current Facility	Existing Need	20-Year Population Growth Scenario	Ideal Population Growth Scenario (Group Session)
Copy Machines (public)	35	50	100	50
Microform Cabinet(s)	20	-	-	45
Supply Storage	190	106	118	141
General Storage	180	271	441	554
Entrance/ Lobby	120	271	441	554
Service/Loading Entrance	-	90	147	185
TOTAL FUNCTIONAL SPACE	7,147	9,781	15,851	19,913
STRUCTURAL SPACE/ NON-ASSIGNABLE SPACE PERCENTAGE APPLIED	28%	28%	25%	25%
GRAND TOTAL (GROSS SQUARE FEET)	***9,148***	***12,520***	***19,965***	***25,042***

ADDITIONAL INFORMATION

Hard Vs. Soft Costs

Site Considerations

Second Story Consideration

HARD VS. SOFT COSTS

It must be recognized that total project costs include many pieces, each of which is subject to significant change as different market forces act upon them. Entire books are written that break down cost components in detail; however, at this point in the planning process, it is probably sufficient to simplify things into two categories:

- Hard Costs
- Soft Costs

Hard costs are sometimes referred to as "brick and mortar" costs or "construction" costs. They are costs incurred in the process of building a building and include things like materials, labor, plumbing, electrical, heating and cooling systems, etc. Hard costs also include preparing the building site for construction. Historically, these costs typically account for 70% - 80% of the overall cost of a project.

Soft costs include things like architectural and design fees, engineering fees, permits, furnishings and moveable equipment, and when applicable fees associated with the use of a professional fundraiser. Historically, soft costs account for 20% - 30% of overall project costs. However, in some instances, these costs can run 35% - 40% or even higher.

Because there is a tremendous variation in the cost of land for building a library, initial planning budgets often exclude land acquisition. It is easy to cite examples of libraries that have been built on property acquired at no cost and other libraries that have been constructed on highly coveted properties valued in millions of dollars. For planning purposes, it is wise to begin the process in a land neutral position, always remembering that both the building site and site preparation will need to be included in the final analysis. Estimating hard costs has always been difficult; however, scarcity of building materials, tight labor markets, and supply-chain issues has made this task even more difficult in recent times. Library construction is not inexpensive. The required floor loading capacities necessitated by heavy book stacks, the fact that library buildings will often be in use for fifty years or more, and the fact that public buildings are often subject to heavy use and abuse adds to their cost. It would be wise to apply a range of $300 - $350 per square foot to new construction hard costs. Renovation costs traditionally are less per square foot, but without a scope determined we recommend using the new costs.

Furthermore, these costs are not static. Planners often stress that "time is money" and, in the past, have frequently advised adding 3% - 5% per year (compounded) to determine likely costs one year, two years, three years, etc. in the future. Unfortunately, the historical 3% - 5% inflation figure has now given way to 8% - 10% (compounded). It is impossible to determine whether this upward trend will continue into the foreseeable future or whether it will return to more moderate rates. The following table illustrates the impact of delay using a $300 hard cost per foot as a base.

I / INFLATION COSTS

Year Constructed	3% Annual Increase Compounded	10% Annual Increase Compounded
2022	$300	$300
2023	$309	$330
2024	$318	$363
2025	$328	$399
2026	$338	$439
2027	$348	$483
2028	$358	$531
2029	$369	$585
2030	$380	$643

SITE CONSIDERATIONS

The old real estate adage that the three most important site consideration factors are "location, location, and location" is witty, but incomplete. The location of a library facility is obviously important. A library that is invisible or hidden away in a seldom-trafficked area may end up underperforming and may therefore offer less value to the public for each dollar invested in building a new facility. However, other considerations are also critical. For example, a library located on a highly visible, prime site in a community in which cars, SUVs, and trucks are the primary modes of transportation that lacks adequate parking may also underperform. How large of a site is required to ensure a good return on investment (ROI)? How much parking is needed to achieve maximum ROI? What are the characteristics of a good site that will maximize use?

How Large of a Site Is Needed?

The "gold standard" formula for determining the optimal size of a site for a typical public library multiplies the footprint of the building (the amount of space covered by the ground floor) by four (4). For example, applying this formula for a single-story 10,000 gross square foot (GSF) building would generate a desired site of 40,000 square feet (SF). This is slightly less than one acre (1 acre = 43,560 SF). Some library planners simplify this standard into a rule-of-thumb of striving for 1 acre for every 10,000 SF of a building's footprint – a 20,000 GSF building would require two (2) acres, a 30,000 GSF would require three (3) acres, and so forth. The rationale behind using the building footprint times four (4) is simple. One-fourth of the space (10,000 SF) would be devoted to the structure, one-fourth (10,000 SF) would be allocated for parking, one-fourth (10,000 SF) would be dedicated to greenspace and drainage, and a final quarter (10,000 SF) would be reserved for future expansion. Although this is an admirable goal, in practice, this gold standard or the even more ambitious "one acre for every 10,000 GSF of building footprint" target is rarely achieved. A more realistic target is a ratio of one-to-three (1:3) or 30,000 SF for every 10,000 GSF of building or a bit over two-thirds (0.69) of an acre for every 10,000 SF of the structure's footprint. While in rare instances (usually in highly urbanized areas with minimal or no setback or greenspace requirements), a 2:1 ratio (a 20,000 SF site) is possible, this target is almost always impractical if for no other reason than it affords inadequate space for parking. This obviously begs the question, "How many parking spaces are adequate?

How Much Parking is Required

Parking ratios quantify the relationship between the size of a building and the number of parking spaces that are provided. Parking ratios are usually stated in terms of spaces per 1,000 gross square feet of facility. Note that parking ratios typically use the total gross square footage of a facility rather that the "footprint" measurement that was applied in calculating the size of the overall site since the larger the overall building, the larger its total occupancy is likely to be.

Recommendations, and in some instances ordinances and/or building development codes vary widely for libraries. Some jurisdictions require the same ratio for public libraries as they apply to general retail establishments. Other communities (usually very large municipalities) state specific parking ratios for public libraries. Typical recommendations and codes fall into a range between one (1) parking space per 1,000 gross square feet (GSF) of building space to four (4) parking spaces per 1,000 GSF. This is obviously a huge range. Consider for a moment that applying the 1:1,000 GSF ratio to a 20,000 GSF building would generate 20 parking spaces while applying the 4:1,000 GSF ratio yields 80 parking spaces – a remarkable difference. It fair to ask what accounts for this extremely wide range.

The nature of the factors at play are nearly as divergent as the ratios. A library in a suburban setting with no public

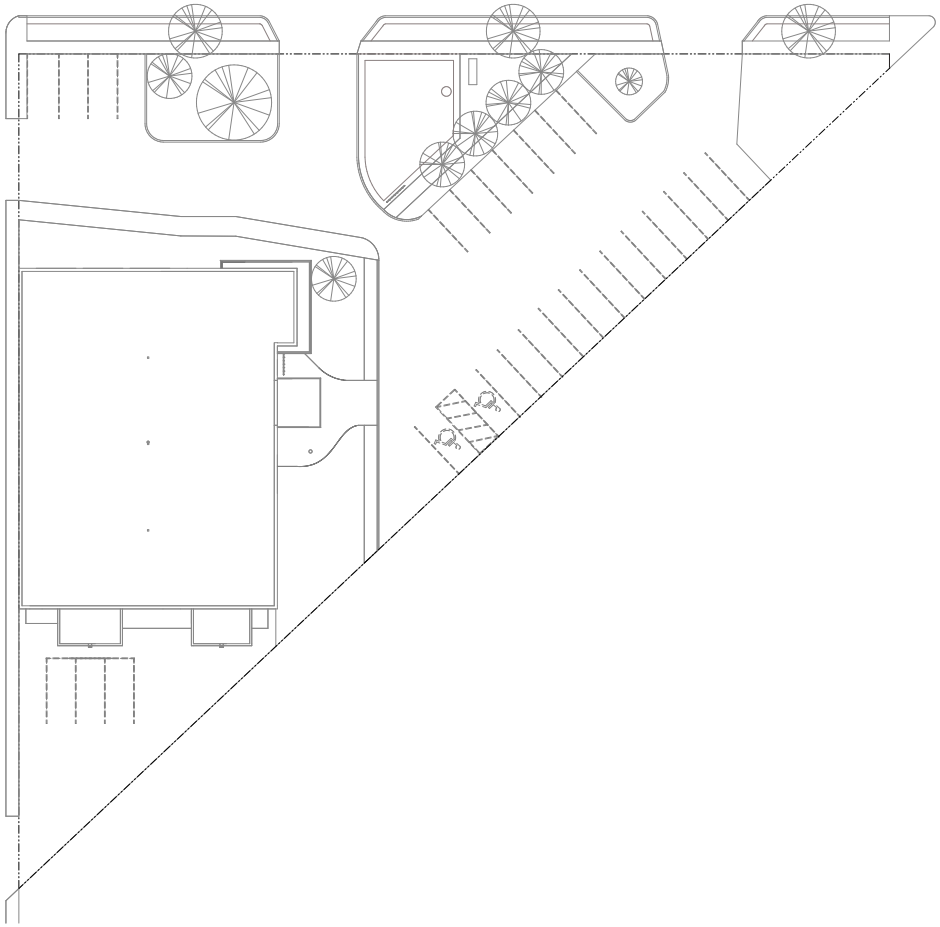
transportation in an area where the majority of the users arrive at the library by car/truck/SUV will tend toward the higher end (4:1,000 GSF) of the scale. Libraries located in large urban areas where many users reach the library by bus or via subway will tend toward to lower end (1:1,000 GSF) of the scale. Libraries located in the heart of smaller communities with considerable pedestrian traffic or where a sizeable number of people ride bicycles to the library will tend toward the middle of the scale.

Another factor to consider is the availability of nearby additional parking that is not designated specifically for library purposes. Examples include libraries located in strip malls where parking is shared among many tenants or libraries that are fortunate to have ample nearby on-street parking with restrictions that prohibit long-term parking. A library of the size of the Le Mars Public Library should shoot for a ratio of somewhere between 2.5:1,000 GSF to 3:1,000 GSF depending on the availability of street parking or other nearby parking.

Other Site Considerations

An entire book could be written on site considerations for libraries; however we wish to offer a few important ones here. In considering alternative sites, ignore the old advice of "don't look a gift horse in the mouth." Fairly often, municipalities and libraries are offered land at a low cost or at no cost. Recognize that free isn't necessarily free. More than one library has accepted "free" property only to find that site preparation cost may exceed the cost of other properties. Contaminated sites require costly remediation. Hilly or rocky sites may require extensive work to prepare them for building. Only a portion of a "free site" might be "buildable" leaving the library lacking the necessary space for the facility and/or parking. In short, go into the site selection process with eyes wide open.

2017 Site Plan



CONSIDERATIONS RELATED TO MULTI-STORY BUILDINGS

Clients and the public often ask, "Why not just add a second floor?" In some instances, this may be possible; however, several important factors must be considered in making such a decision. The first, and perhaps the most obvious, is the feasibility of adding a second floor. This is primarily an engineering question. Unless a building was specifically designed with the intent of adding a second floor at a future date, it is unlikely that the existing footings/foundation are capable of supporting a second story. This does not necessarily mean that it is impossible to build an upper level, it simply means that achieving this result could be costly. In laypersons' terms, it might involve constructing a new structure with new footings on stilts over the top of the existing building. In essence, adding a second floor might not be as simple a solution as it might initially appear.

Nevertheless, for a moment, let us assume that erecting a second story is both feasible and affordable. What else must be considered in adopting a second story strategy? A two-story design obviously requires providing a way to move between the levels. For a public building such as a library, this involves at a minimum, the provision of both an elevator and two sets of stairways. The square footage required for these elements are duplicated for each floor. In other words. Space is required on the first level for the elevator and on the second floor for the elevator. The same is true for each stairwell.

Although the size of the stairwells and landings is dependent on the expected occupancy of the areas serviced, an estimate of square footage required for these components in a small to medium-sized library is approximately 1,600 square feet. This is space that needs to be built, but space that serves no other function than enabling people to move from floor to floor. If a modest estimate of $200 per square foot of space is applied, this equates to $320,000 of additional cost that does not add to the services the library offers. This estimate does not include the cost of the elevator itself or the ongoing costs associated with elevator maintenance.

A third, and financially even more significant factor relates to staffing an additional level. If it is assumed that a multi-story building will require just one additional staff position to provide supervision and security, the estimated additional 20-year operational costs can easily exceed one-million dollars. To illustrate this point, a employee making $17.00 per hour would make approximately $35,000 per year without any benefits in year one. If allowance is made for increasing this compensation by 2.5% per year over the twenty-year planning horizon, a total of $894,063 would be required to maintain one position. Simply adding current employer-required social security payments of 6.2% yields an additional $55,432 bringing the total to $949,495 without considering any other benefit costs.

There are instances in which a two-story design solution makes sense. Some library planners suggest that a second story should be considered for buildings exceeding 30,000 or 35,000 square feet on a single floor. Other considerations such as the topography of a low-cost/no-cost available site vs. high acquisition costs for an alternative site may also play into the decision-making process. Nevertheless, consideration of two-story solutions should be made with an eye toward both the initial and long-term costs of such a decision.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